Siemon Innovation

Inspired by our past, focused on the future

In 1903, Carl Siemon launched The Siemon Company on the strength of his own innovative plastic compounds and soon began pioneering new telecommunication technologies.

Over a century later that spirit of innovation is still at the core of everything we do at Siemon – driving us to develop the most forward-looking, high-quality line of network cabling solutions in the world.

This catalog represents over a century of Siemon expertise, detailing the latest innovations and key products within Siemon’s high quality, high performance product portfolio.

New in this edition:

- **LightHouse Advanced Fiber Cabling Solutions** - Siemon’s most comprehensive fiber solution set to meet nearly any network infrastructure need
- **Innovative LC BladePatch®** with push-pull latch providing the best connector accessibility in high density patching environments
- **Ultra high density, easily managed, LightStack™ Plug and Play Fiber Solutions**
- **Time Saving MAX TurboTool™** - Multi-pair, single action termination tool for MAX® outlets achieving world-record termination speeds
- **42U, 45U and 48U versions of the feature-rich VersaPOD®, new V800™ and V600™ Data Center Cabinet Solutions**
- **A complete line of Intelligent Power Distribution Units**
- **EagleEye™ Connect Automated Infrastructure Management (AIM) Software for MapIT® G2**
- **MapIT G2 TERA® Solution**
- **And more...**
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Because we continuously improve our products, Siemon reserves the right to change specifications and availability without prior notice.

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Category 7/7\textsubscript{A}/Class F/F\textsubscript{A} Products

Exceeding ISO/IEC Category 7/7\textsubscript{A}/Class F/F\textsubscript{A} specifications, Siemon’s fully shielded TERA\textsuperscript{\textregistered} end-to-end cabling solution is the highest-performing, most secure twisted-pair copper cabling system available. TERA supports performance of 10Gb/s and passes stringent TEMPEST security testing.

Beyond industry best speed and best total cost of ownership, TERA’s unique cable-sharing ability in support of lower speed applications results in a more “Green” solution and can also provide up-front savings through the reduction of cable counts. By combining the use of one TERA outlet dedicated for high-speed applications of 1Gb/s to 10Gb/s and another for cable sharing of lower speed voice and video applications, end-users simultaneously benefit from the highest performing and most cost effective copper solution.

The only non-RJ connector approved as a Category 7\textsubscript{A}/Class F\textsubscript{A} interface, TERA fits within a standard RJ45 footprint and is easily connected to RJ45 equipped electronics via hybrid TERA to RJ patch cords.

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TERA® Outlet

Chosen as an industry standard interface for Category 7/Class F and Category 7A/Class FA, the Siemon TERA outlet still is by far the highest performing twisted-pair copper connector in the world. When installed as part of a TERA solution, each pair delivers 1.2 GHz of bandwidth — exceeding Category 7A/Class FA specifications. This extra bandwidth supports demanding applications like 10GBASE-T and broadband video.

**Easy Installation** — CPT-T tool reduces preparation and termination time.

**Mounting Options** — The TERA outlet is compatible with TERA-MAX® patch panels and all MAX series faceplates.

**Quick-Ground™ Termination** — No additional steps required for termination. Cable shield is automatically terminated within the outlet without additional steps or tools.

**Compact Design** — Slim, compact design allows outlets to be side-stacked and inserted from either the front or rear of faceplates and patch panels.

**Sheltered Termination** — Connector automatically assures proper termination of cable shield — no additional processes required for grounding cable.

**Fully Shielded** — Terminates fully shielded (F/FTP and S/FTP) cable - virtually eliminates alien crosstalk.

**Bend Relief** — Rear boot provides bend relief for cable exiting the plug and outlet.

**Hinged Door** — Outlets include a hinged door to prevent exposure to dust and other contaminates.

**Tempest Security Tested** — The TERA system is the first and only copper system to pass TEMPEST emissions testing by an independent, NSA certified lab, Dayton T. Brown Inc.

**Application Sharing** — TERA’s ability to support multiple applications over a single 4-pair cable and outlet can save significant material and installation costs.

**Quadrant Isolation** — Shielded quadrant design fully isolates pairs for optimum NEXT performance.

**Compact Design** — Slim, compact design allows outlets to be side-stacked and inserted from either the front or rear of faceplates and patch panels.
**TERA® 4-Pair Outlet**

TERA outlets are the industry’s highest performing network cabling connectors. Outlets accept 1-, 2- and 4-pair plugs and terminate fully shielded Category 7 and 7A cables. TERA outlets can be used in both the work area and in the telecommunications room.

**Part #**

<table>
<thead>
<tr>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>T7F-01-1 . . . . . . . . . . . . . . . . . . . TERA 4-pair outlet with black door, latch and boot. Compatible with 0.64-0.55mm (22-23 AWG) solid S/FTP and F/FTP cable</td>
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</table>

**TERA Cable Sharing**

Up to four simultaneous applications can be served from a single 4-pair, S/FTP cable and TERA outlet, saving significant materials, labor, pathway and rack space.

One TERA replaces four 1-pair analog voice outlets — perfect for call centers.
TERA®- MAX® Patch Panels

TERA-MAX 19 inch patch panels provide outstanding performance and reliability in a shielded, high-density modular solution. As outlets are snapped into place, resilient ground tabs assure that each outlet is properly grounded. No secondary outlet grounding operations are required, reducing overall installation time.

**Angled TERA-MAX** — Allows direct routing of cables to vertical managers, eliminating the need for horizontal cable managers

**Standard Fit** — Panels can be mounted directly on standard 19 inch relay rack or cabinet

**Durable** — High strength steel with black or metallic finish

**Port Identification** — Bold port numbering enables quick identification of outlets

**Installation Friendly** — Individual modules snap into place, providing integrated grounding without additional steps

**Cable Management**
Integral rear cable manager facilitates the orderly routing of horizontal cables as well as maintaining proper bend radius for optimum performance.

**Slim Design**
Use TERA outlets in TERA-MAX patch panel for telecommunications room applications.

**Integrated Grounding**
Panels feature integrated grounding via resilient ground tabs engaged during module insertion.

**TERA-MAX Patch Panels**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>TM-PNLZ-24-01</td>
<td>24-port TERA-MAX panel, black, 1U</td>
</tr>
<tr>
<td>TM-PNLZ-24</td>
<td>24-port TERA-MAX panel, metallic, 1U</td>
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<tr>
<td>TM-PNLZA-24-01</td>
<td>24-port Angled TERA-MAX panel, black, 1U</td>
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<tr>
<td>TM-PNLZA-24</td>
<td>24-port Angled TERA-MAX panel, metallic, 1U</td>
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<tr>
<td>PNLA-CVR-01</td>
<td>Angled panel cover, black</td>
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</tbody>
</table>

Panels include designation labels, cable ties and mounting hardware.
Note: 1U = 44.5mm (1.75 in.)

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TERA® - Patch Cords

Part of the TERA cabling solution, TERA-to-TERA patch cords exceed bandwidth of Category 7/A/Class F/A specifications when combined with the TERA outlet. TERA delivers up to 1.2 GHz of bandwidth per pair, providing the extra bandwidth for demanding applications like 10GBASE-T and Broadband Video. Facilitated by 1- and 2-pair patch cords, TERA’s extended performance also supports cable sharing — the simultaneous convergence of video, voice and data onto a single 4-pair cable and outlet.

2-Pair TERA to Shielded Category 5e RJ-45 plug for 10/100 Ethernet, VoIP and video over IP

1-Pair TERA to TERA — for analog voice and video patching. Video balun cord also available

1-Pair TERA to RJ11 plug for analog voice

4-Pair TERA to Shielded Category 6 RJ-45 plug for 1G/10G Ethernet performance

4-Pair TERA to TERA — supports Category 7/A/Class F/A performance to 10Ghz

Full Compatibility With Active Electronics
TERA to RJ45 patch cords allow the TERA system to be easily connected to RJ45 equipped active electronics.

Cable Sharing
Multiple applications can be run over one 4-pair cable and outlet, saving significant material and pathway space.

TERA Field-Terminated Plug

TERA 4-pair plugs can be used to terminate horizontal cable into exact lengths for consolidation point applications. Plugs terminate fully shielded Category 7 and 7A solid cable.

Part # Description
T7P4-B(XX)-1 4-pair TERA plug with colored boot.
Compatible with 0.64 – 0.55mm (22 – 23 AWG) solid S/FTP and F/FTP cable
T7P4-B(XX)-2 4-pair TERA plug with black boot.
Compatible with 0.48mm (26 AWG) stranded S/FTP and F/FTP cable

Use (XX) to specify boot color: 01 = black, 02 = white, 03 = red, 05 = yellow, 06 = blue, 07 = green
**TERA® Patch Cords**

### TERA Category 7A Patch Cords

Category 7A compatible, TERA to TERA, LS0H cable assembly, ivory jacket, colored boot.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>T1VC-(XX)M-B01L</td>
<td>1-pair TERA to PAL connector, LS0H cable assembly, gray jacket</td>
</tr>
<tr>
<td>T1VF-(XX)M-B01L</td>
<td>1-pair TERA to F connector, LS0H cable assembly, gray jacket</td>
</tr>
<tr>
<td>T1S4V-(XX)M-B01L</td>
<td>1-pair shielded TERA to RJ45 patch cord</td>
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</tbody>
</table>

**TERA Video Balun Cords**

TERA CATV baluns provide the optimum solution for the transmission of TV or CATV signals over structured cabling systems that were historically limited to voice and data transmission. These products convert the unbalanced TV signals designed for coaxial cabling (75 Ω impedance) to balanced signals (100 Ω impedance) as required for transmission over twisted pair (balanced) cabling. The TERA CATV adapters are specified and useable to 862 MHz. The 1-pair shielded TERA to shielded RJ45 patch cord allows connection to third-party RJ45 baluns.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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<tr>
<td>T1VF-(XX)M-B01L</td>
<td>T1S4V-(XX)M-B01L</td>
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</table>

**TERA Category 6A Patch Cords**

Augmented Category 6A, TERA to Shielded RJ-45 modular plug, LS0H cable assembly, ivory jacket, colored boot.

<table>
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<th>Part #</th>
<th>Description</th>
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<tr>
<td>T4(X)-(XX)M-B(XX)L</td>
<td>T1S4(X)-S(XX)M-B(XX)L</td>
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</table>

**TERA Category 5e Compatible Patch Cords**

TERA to Shielded RJ-45, or TERA to 6 position (Voice) modular plug, LS0H cable assembly, ivory jacket, colored boot.

<table>
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<th>Part #</th>
<th>Description</th>
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<tr>
<td>T(XXX)-(XX)M-B(XX)L</td>
<td>CLIP-(XX) . . . . . . . . . . . . . . . . . . Color coding clip, bag of 25</td>
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TERA® - S/FTP Trunking Cable Assemblies

Siemon’s TERA copper trunking cable assemblies provide an efficient and cost effective alternative to individual field-terminated components. Combining factory terminated and tested TERA outlets and fully shielded Siemon Category 7A cable, Siemon TERA trunking cable assemblies offer industry leading performance to 10Gb/s. Standard configurations also help maintain consistent cable layout, facilitate efficient moves, adds and changes and significantly reduce scrap versus typical field installation. Modular design, in conjunction with reduced scrap, makes trunks the most “Green” method for copper cabling installations.

Identification — Each cable assembly is coded with a unique identification number for administrative purposes.

Fully Shielded Cable — Utilizes high quality Category 7A S/FTP Siemon cable

Factory Terminated and Tested — Utilizes TERA outlets, factory terminated and tested for performance to 10Gb/s

Breakout Kit — Unique breakout kit creates optimal cable orientation and limits cable crossing

Data Centers
Ideal for data centers, raised floor and ladder rack environments enabling up to 75% faster deployment time. Well organized cable bundles improve cable management and air flow.

Simple, Snap-In Installation
Straight Cut aligns TERA outlets for optimal snap in installation into TERA-MAX® patch panels and allows left, right or center exit.

Protective Packaging
Each assembly is packaged individually to protect factory terminations.

TERA S/FTP Trunking Cable Assemblies

6 Leg Double-Ended Trunking Cable Assemblies

<table>
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<th>Part #</th>
<th>Description</th>
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<tr>
<td>TJRD6E-F1F1(XXX)F</td>
<td>Riser rated (CMR), blue jacket, 1000MHz</td>
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<tr>
<td>TJPD6E-F1F1(XXX)F</td>
<td>Plenum rated (CMP), blue jacket, 1000MHz</td>
</tr>
</tbody>
</table>

Use (XXX) to specify length: 2.7 - 90m (009 - 295 ft.) in increments of 1 meter (3 feet)

Other lengths and configurations available upon request.

Note: These products are made to order. Call for lead time and part number availability in your region.
COMPLIANCE
• ISO/IEC 11801: Ed 2.2 (Class Fₐ)
• IEC 61156-5 Ed 2.1 (Category 7 AsyncCallback)
• IEEE 802.3an
• EN 50288 • EN 55022
• EN 50173 • EN 55024

CABLE CONSTRUCTION
• S/FTP
• Nominal Cable O.D.: 7.9mm (0.31 in.)
• CMP: 0.64mm (0.025 in.) 22 AWG (solid bare copper)
• CMR: 0.57mm (0.022 in.) 23 AWG (solid bare copper)
• Pairs individually shielded with aluminum-polyester foil
• Overall tinned copper braid

ELECTRICAL SPECIFICATIONS

| DC Resistance | <7.32Ω/100m |
| DC Resistance Unbalance | 2% |
| Mutual Capacitance | 5.8 nF/100m |
| Capacitance Unbalance | <33pF/100m |
| NVP | CMR = 79% - CMP = 72% |
| TCL | 40-10 log(dB) |
| Delay Screw | ±20ns |

PHYSICAL PROPERTIES

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TRANSMISSION PERFORMANCE

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<th>ACR-F (dB)</th>
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*Values below 4 MHz are for information only.
All performance based on 100 meters (328 ft.).

TERA® E10 Cable (North America)

Ordering Information:

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<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>9T7R4-E10-06-R1</td>
<td>Plenum (CMP, CSA FT6), Blue Jacket, 305m (1000 ft.) Reel</td>
</tr>
<tr>
<td>9T7R4-E06-06-R1</td>
<td>Riser (CMR, CSA FT4), Blue Jacket, 305m (1000 ft.) Reel</td>
</tr>
</tbody>
</table>

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TERA® E10 Cable (International)

COMPLIANCE
- ISO/IEC 11801: Ed 2.2 (Class F)
- IEC 61156-5 Ed 2.1 (Category 3A)
- IEEE 802.3an
- EN 50288
- EN 55022
- EN 50173 • EN 55024
- LSOH: IEC 60332-1, IEC 60754, and IEC 61034

CABLE CONSTRUCTION
- S/FTP
- Nominal jacket OD: 7.7mm
- 0.57mm solid (non-tinned) copper, 23 AWG
- Sequential measurement markings on jacket
- Pairs individually shielded with aluminum-polyester foil
- Overall tinned-copper braid

ELECTRICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>DC Resistance</th>
<th>&lt;7.32 Ω/100m</th>
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<tbody>
<tr>
<td>DC Resistance Unbalance</td>
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<tr>
<td>Mutual Capacitance</td>
<td>5.8 nF/100m</td>
</tr>
<tr>
<td>Capacitance Unbalance</td>
<td>≤ 160 pF/100m</td>
</tr>
</tbody>
</table>
| Characteristic Impedance (ohms) | 1-100 MHz: 100 ± 15%
| | 100-250 MHz: 100 ± 22%
| | 250-1000 MHz: 100 ± 25% |
| NVP | 70% |
| TCL | 40-10 x log(f)/dB |
| Delay Skew | 25ns/100m |

PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>LSOH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulling Tension (max)</td>
</tr>
<tr>
<td>Bend Radius (min)</td>
</tr>
<tr>
<td>Installation Temperature</td>
</tr>
<tr>
<td>Storage Temperature</td>
</tr>
<tr>
<td>Operating Temperature</td>
</tr>
</tbody>
</table>

TRANSMISSION PERFORMANCE

GUARANTEED WORST CASE

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Insertion Loss (dB)</th>
<th>NEXT (dB)</th>
<th>PS NEXT (dB)</th>
<th>ACR (dB)</th>
<th>PSACR (dB)</th>
<th>ACR-F (dB)</th>
<th>PS ACR-F (dB)</th>
<th>Return Loss (dB)</th>
<th>Propagation Delay (ns)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000.0</td>
<td>62.0</td>
<td>54.5</td>
<td>45.0</td>
<td>20.0</td>
<td>15.0</td>
<td>30.0</td>
<td>25.0</td>
<td>30.0</td>
<td>15.0</td>
</tr>
</tbody>
</table>

SIEMON TYPICAL

Values below 4 MHz are for information only.
**Values for IEC 61156-5 above 1000 MHz are for information only.

Part # Description
9T7L4-E10.................................LS0H (IEC 60332-1), Violet Jacket, 305m

Ordering Information:  
9T7L4-E10.................................LS0H (IEC 60332-1), Violet Jacket, 305m

www.siemon.com
Siemon’s Z-MAX® 6A Network Cabling Solutions

The development of the Z-MAX 6A line began with a simple goal — design and build the best RJ-45 based cabling solution — period.

And “best” was not a vague metric. Z-MAX was built to be best across the board:

- Highest performance margins across all critical transmission parameters
- Fastest, easiest and most reliable termination process
- Superior transmission consistency
- The best customer focused usability, efficiency and ergonomic features

To meet these goals, we did what we have done for over a century — innovate.

As you explore the Z-MAX line, you’ll see Siemon innovation at every turn. From our patent-pending Zero-Cross™ termination to the exclusive PCB-based smart plug technology integrated into every Z-MAX cord to our hybrid flat/angled outlets to the easy-to-use Z-TOOL™, no opportunity to improve this family was overlooked.

Section Contents

- Z-MAX Introduction ........................................2.1 - 2.3
- Z-MAX 6A Shielded Overview .........................2.4 - 2.5
- Z-MAX 6A Shielded Outlets ..............................2.6
- Z-MAX 6A Shielded Modular Cords .................2.7
- Z-MAX 6A Shielded Patch Panels .....................2.8
- TERA-MAX® Patch Panels ..........................2.9
- Z-MAX 6A Pre-terminated Shielded Trunk Cable ......2.10
- Category 6A Shielded BladePatch® ...................2.11
- Category 6A F/UTP Cable (US) .......................2.12
- Category 6A F/UTP Cable (International) ..........2.13
- Z-MAX 6A UTP Overview ..........................2.14 - 2.15
- Z-MAX 6A UTP Outlets ..........................2.16
- Z-MAX 6A UTP Modular Cords ....................2.17
- Z-MAX 6A UTP Patch Panels ......................2.18
- Z-MAX 6A UTP Trunk Cable Assembly .............2.19
- Category 6A UTP BladePatch ..........................2.20
- Category 6A UTP Cable (North America) ..........2.21
- Category 6A UTP Cable (International) ........2.22
DON’T BLINK

Best-in-class Category 6A performance for UTP and Shielded in just 45 seconds.

While average termination time including cable preparation is 45 seconds, some Siemon certified installers have set world records for Category 6A Z-MAX terminations at less than 30 seconds.

1 0:20 sec.

Prepare cable and place into Z-MAX’s patent-pending Zero-Cross™ lacing cap. Close hinged cable retention/grounding clip.

2 0:40 sec.

Lace conductor pairs into color-coded linear lacing channels and trim excess.

3 0:45 sec.

Insert lacing cap into Z-MAX outlet and terminate with the one-step Z-TOOL™.

0 Complete!

Watch Z-MAX termination video at www.siemon.com/us/zmax
Siemon Innovations that make it possible. . .

Highest-Performing Category 6A Systems

<table>
<thead>
<tr>
<th></th>
<th>Z-MAX 6A UTP</th>
<th>Z-MAX 6A F/UTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>IL</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>NEXT</td>
<td>3.0 dB</td>
<td>3.0 dB</td>
</tr>
<tr>
<td>PSNEXT</td>
<td>3.5 dB</td>
<td>3.5 dB</td>
</tr>
<tr>
<td>ACR-F</td>
<td>7 dB</td>
<td>7 dB</td>
</tr>
<tr>
<td>PSACR-F</td>
<td>10 dB</td>
<td>10 dB</td>
</tr>
<tr>
<td>RL</td>
<td>3 dB</td>
<td>3 dB</td>
</tr>
<tr>
<td>PSANEXT</td>
<td>1 dB</td>
<td>10 dB</td>
</tr>
<tr>
<td>PSAACR-F</td>
<td>1 dB</td>
<td>5 dB</td>
</tr>
<tr>
<td>ACR-N</td>
<td>6 dB</td>
<td>6 dB</td>
</tr>
<tr>
<td>PSACR-N</td>
<td>6.5 dB</td>
<td>6.5 dB</td>
</tr>
</tbody>
</table>

Performance based on use of 24 x 2M cords and 24 port /1U density.

With Z-MAX, Siemon has shattered the RJ-45 barrier. We have achieved best-in-class performance through an innovative “matched” system which combines an optimally tuned plug with a higher performance outlet.

- Best UTP and F/UTP Category 6A margins
- Leading performance on all parameters, not just NEXT
- Exceptional alien crosstalk performance
- ISO channel, link and component compliant
- TIA channel, link and component compliant
- Consistent, superior performance, eliminates marginal testing (*PASS)

Patent-Pending Smart Plug Technology

A critical element of Z-MAX systems’ exceptional performance is our smart-plug technology. The Z-MAX smart plug contains a tuned printed circuit board (PCB), normally only found in outlets, to achieve high performance tuning. This advancement in miniaturization has packaged the tuning capability and consistency of a PCB in an industry standard RJ-45 footprint, giving the Z-MAX patch cord unsurpassed performance capabilities.

- Patent pending PCB-based plug enables performance levels not possible with traditional cords
- Narrower NEXT range provides capability to tune to higher channel performance levels
- Advanced contact technology and automated assembly results in decreased performance variability compared with crimp-type plugs
- Smart-Plug is fully backwards-compatible and standards compliant
- PCB-based contacts eliminate pair-crossing condition present in traditional cords
- Solderless, press-fit contact technology ensures long-term reliability
Zero-Cross™ Terminations

The crossing of cable pairs has long been recognized as a source of variability and performance degradation in connector systems. The linear design of the Z-MAX termination module allows conductors to feed naturally into position without the need for pair crossing.

- Linear design dramatically speeds and simplifies cable prep and conductor alignment
- Removes a significant source of crosstalk present in all other RJ-45 outlets
- Maintains and protects cable pair structure for optimized transmission performance consistency
- Intuitive cable lacing significantly minimizes miswires that lead to costly reworks

Diagonal IDC Contact Orientation

Siemon engineers thought “outside of the box” when they developed our diagonally-oriented IDC contact technology. This unique configuration places contacts on a single plane yet varies the alignment of each individual contact within the Z-MAX outlet. This design provides distinct performance benefits compared with traditional rectangular contact layouts.

- Maximizes pair-to-pair separation from adjacent outlets to minimize alien crosstalk even in the most dense Category 6A patching environments
- Enhances NEXT performance within outlets
- Limits untwist of pairs at termination to maximize cable performance
- Fully enclosed IDC’s eliminates exposure of uninsulated conductors
Z-MAX® 6A Shielded System Features and Benefits

Combining consistent best-in-class performance, unparalleled usability and speed of termination with the security and robust noise immunity of a shielded cabling system, Siemon’s Z-MAX 6A shielded end-to-end solution represents the cutting edge of Category 6A cabling. The Z-MAX 6A shielded system provides the highest margins on all ISO and TIA performance requirements for Category 6A/Class E_A, including critical alien crosstalk parameters.

Siemon’s Z-MAX 6A shielded channel consists of the shielded Z-MAX 6A outlet, Siemon Category 6A shielded cable and Z-MAX patch panels as well as stranded and solid options.

Features and Benefits

• Hybrid work area outlets mount in either flat or angled orientation
• Industry’s fastest termination time accelerates project completion
• Guided, tool-based termination process enhances system quality and reliability
• Field-terminated outlets or pre-terminated trunking cables can be quickly snapped into patch panels and released to enable rapid deployment or changes
• High density 48 port, 1U options provide the flexibility to work within strict space limitations saving valuable rack and cabinet space
• Integrated Quick-Ground™ outlet shield and panel connections ensures fast and reliable grounding
• Shielded outlet and modular cord color-coding provides the capability to code and customize your cabling system
System Performance Overview

Standards Compliance

- ISO/IEC 11801 Class EA
- ISO/IEC 11801 2nd ed Amendment 1
- ISO/IEC 11801 2nd ed Amendment 2
- IEC 60603-7
- TIA-968-A (formerly FCC Part 68 Subpart F)
- ANSI/TIA-568-C.2
- IEEE 802.3an
- IEEE 802.3af (PoE)
- IEEE 802.3at (PoE+)
- ETL Tested
- UL-listed

Z-MAX 6A Shielded Channel Performance

GUARANTEED 4-CONNECTOR CHANNEL MARGINS TO ISO / IEC 11801 2.1 (1 - 500 MHz)

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>IL</td>
<td>3%</td>
</tr>
<tr>
<td>NEXT</td>
<td>3.0 dB</td>
</tr>
<tr>
<td>PSNEXT</td>
<td>3.5 dB</td>
</tr>
<tr>
<td>ACR-F</td>
<td>7 dB</td>
</tr>
<tr>
<td>PSACR-F</td>
<td>10 dB</td>
</tr>
<tr>
<td>RL</td>
<td>3 dB</td>
</tr>
<tr>
<td>PSANEFT</td>
<td>10 dB</td>
</tr>
<tr>
<td>PSAACR-F</td>
<td>5 dB</td>
</tr>
<tr>
<td>ACR-N</td>
<td>6 dB</td>
</tr>
<tr>
<td>PSACR-N</td>
<td>6 dB</td>
</tr>
</tbody>
</table>

Performance based on use of 24 x 2M cords and 24 port /1U density.
Z-MAX® 6A Shielded Outlets

The shielded Z-MAX outlet offers best-in-class performance in every critical specification, exceeding all Category 6A performance requirements, including alien crosstalk. Its innovative features not only speed and simplify termination, but remove installation variability for consistently high and repeatable performance — every termination, every time!

**Flexibility and Simplified Ordering**
A single hybrid outlet supports both angled and flat mounting orientations.

**Enhanced Shielding Effectiveness**
High level of shielded effectiveness exceeds ISO 360 degree shielding requirements via die cast housing and hinged cable retention/grounding clip.

**100% Jack-to-Jack Plastic Isolation**
Plastic bezels prevent contact between metal housings when side stacking to ensure ground quality and ANEXT performance.

**Quick-Ground™ Termination**
Cable shield is automatically terminated to the outlet without additional steps.

**Spring Door Option**
Minimizes exposure to dust and other contaminants.

---

### Ordering Information:


<table>
<thead>
<tr>
<th>Mounting Style</th>
<th>Bezel Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Blank) = Hybrid Flat/Angled</td>
<td>01= Black</td>
</tr>
<tr>
<td>K = Keystone</td>
<td>02= White</td>
</tr>
<tr>
<td>03= Red</td>
<td>09= Orange</td>
</tr>
<tr>
<td>04= Gray</td>
<td>20= Ivory</td>
</tr>
<tr>
<td>05= Yellow</td>
<td>80= Light Ivory</td>
</tr>
</tbody>
</table>

Outlet terminates S/FTP, F/FTP and F/UTP cable constructions with 22 – 26 AWG (0.64 – 0.51mm) solid and 26 AWG (0.48mm) stranded conductors, with up to 0.90mm diameter conductors and up to 1.48mm diameter over insulation.

Add “D” to end of part number for spring door option.

Add “B” to end of part number for bulk project pack of 100 modules (hybrid modules include icons).

For more Z-MAX icon colors and options see page 8.5.

---

www.siemon.com
Z-MAX® 6A Shielded Modular Cords

Combining the unparalleled performance of an exclusive PCB-based plug, noise-resistant shielded construction and a host of innovative user friendly features, the shielded Z-MAX 6A modular cords are the ultimate Category 6A cord. All cords are 100% factory-tested to ensure performance and compliance.

High Performance Cable — Patch cords feature Category 7 S/FTP stranded cable for optimal transmission performance while eliminating alien cross-talk

Integrated PCB — PCB equipped Smart Plug optimizes signal tuning for exceptional transmission

Fixed Front Contacts — Ensure proper mating with outlets to eliminate the performance variability of traditional crimp-style terminations

Superior Performance Consistency — Rear contacts maintain cable twist to point of termination and provide robust strain relief. Solderless, press-fit contact technology ensures long-term reliability

Low Profile Boot Design — Optimizes side-stackability of patch cords and allows use in even the most dense patching environments

Excellent Bend Relief
Boot ensures proper bend relief, critical for Category 6A performance.

Colored Clips
Removable clips allow field color coding even when cords are connected.

Cantilevered Latch — Allows latch activation from further back on the boot for superior accessibility in high density environments

Solid Cord Option
Solid F/UTP assemblies are available for consolidation point and equipment cord applications.

Ordering Information:

ZM6A-S(XX)-(XX) . . . . . . . . . Z-MAX 6A shielded (S/FTP), double-ended, stranded modular cord, clear boot, T568A/B, dual-listed CM/LS0H
Length | Jacket Color
--- | ---
03 = 0.9m (3 ft.) | 01 = Black, 04 = Grey, 07 = Green
05 = 1.5m (5 ft.) | 02 = White, 05 = Yellow, 08 = Violet
07 = 2.1m (7 ft.) | 03 = Red, 06 = Blue, 09 = Orange
10 = 3.1m (10 ft.)
15 = 4.6m (15 ft.)
20 = 6.1m (20 ft.)

Add “B” to end of part number for bulk project pack of 100 cords.

CLIP-(XX) . . . . . . . . . . . . . . Color coding clip, bag of 25
Clip Color
---
01 = Black, 02 = White, 03 = Red, 04 = Grey, 05 = Yellow, 06 = Blue, 07 = Green, 08 = Violet, 09 = Orange

ZC6A-S(XX)(X)(X) . . . . . . . . . Z-MAX 6A shielded (F/UTP) solid modular cord, blue jacket, clear boot
Length | Plugs
--- | ---
10 = 3.1m (10 ft.) | (Blank) = Single-ended
20 = 6.1m (20 ft.) | 0 = CAT5e
30 = 9.1m (30 ft.) | P = CAT6
40 = 12.2m (40 ft.) | D = Double-ended (T568A/B)
50 = 15.2m (50 ft.) |
60 = 18.3m (60 ft.) |

www.siemon.com
Z-MAX® 6A Shielded Patch Panels

Z-MAX patch panels provide outstanding performance and aesthetics in a shielded, high-density modular solution. The Z-MAX panels provide rapid and reliable installation by accelerating outlet mounting, grounding, and cable tie-down operations.

In addition to traditional 24 port / 1U flat and angled versions, the Z-MAX shielded panels are also available in 48 port / 1U configurations to permit high density installations.

- **High-Density** — Provides up to 48 ports in just 1U to reduce valuable rack/cabinet space consumption
- **Port Identification** — High visibility magnifying labeling system enables quick identification of outlets
- **Durable** — High strength steel with black finish and scratch/fade resistant port marking
- **Flexible** — Both flat and angled panel options
- **Integrated Quick-Ground™** — Panels feature embedded conductive strips to automatically ground Z-MAX outlets to panel upon insertion

**Ordering Information:**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z6AS-PNL(X)-24</td>
<td>Z-MAX 24-Port, category 6A shielded patch panel kit, 1 RMS, black, with outlets</td>
</tr>
<tr>
<td>Z6AS-PNL(X)-48K</td>
<td>Z-MAX 48-Port, category 6A shielded patch panel kit, 1 RMS, black, with outlets</td>
</tr>
<tr>
<td>ZS-PNL(X)-24E</td>
<td>Z-MAX 24-Port shielded patch panel, 1 RMS, black, empty</td>
</tr>
<tr>
<td>ZS-PNL(X)-48E</td>
<td>Z-MAX 48-Port shielded patch panel, 1 RMS, black, empty</td>
</tr>
</tbody>
</table>

Use (X) to specify mounting style: (Blank) = Flat, A = Angled

**Fixed Wire Manager:**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z6AS-P(X)-24</td>
<td>Z-MAX 24-Port, category 6A shielded patch panel with removable wire manager kit, 1 RMS, black, with outlets</td>
</tr>
<tr>
<td>Z6AS-P(X)-48</td>
<td>Z-MAX 48-Port, category 6A shielded patch panel with removable wire manager kit, 1 RMS, black, with outlets</td>
</tr>
<tr>
<td>ZS-P(X)-24</td>
<td>Z-MAX 24-Port shielded patch panel with removable wire manager, 1 RMS, black, empty</td>
</tr>
<tr>
<td>ZS-P(X)-48</td>
<td>Z-MAX 48-Port shielded patch panel with removable wire manager, 1 RMS, black, empty</td>
</tr>
</tbody>
</table>

Use (X) to specify mounting style: (F) = Flat, A = Angled

Panels include Z-TOOL®, label / icon holders, designation labels, cable ties, grounding lugs, and mounting hardware.

Note: 1U = 44.5mm (1.75 in.) * included in kit only

**Panel Accessories:**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z-PNL-PL24</td>
<td>Patch panel label sheet, numbered 1 to 24, bag of 100</td>
</tr>
<tr>
<td>Z-PNL-PL48</td>
<td>Patch panel label sheet, numbered 25 to 48, bag of 100</td>
</tr>
<tr>
<td>Z-PNL-PS</td>
<td>Patch panel label holder, bag of 25</td>
</tr>
<tr>
<td>Z6A-SP</td>
<td>Z-MAX 6A shielded patch panel outlet</td>
</tr>
<tr>
<td>PNL-A-CVR-01</td>
<td>Angled panel cover, black</td>
</tr>
<tr>
<td>Z-BL-01</td>
<td>Z-MAX panel blank, bag of 10, black</td>
</tr>
</tbody>
</table>

www.siemon.com
TERA-MAX® Patch Panels

TERA-MAX patch panels provide outstanding performance and reliability in a shielded, high-density modular solution. As outlets are snapped into place, resilient ground tabs assure that each outlet is properly grounded for maximum protection from outside interference. No secondary outlet grounding operations are required, reducing overall installation time.

Integrated Grounding
Panels feature integrated grounding via resilient Quick-Ground™ tabs automatically engaged during Z-MAX® outlet insertion.

Single Outlet Solution
Hybrid (flat/angled) shielded Z-MAX outlets used in the work area are required for use in TERA-MAX panels creating a common outlet solution for all locations.

Future Flexibility
TERA-MAX panels also accept TERA® outlets to support potential future infrastructure upgrades.

Ordering Information:

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TM-PNLZ-24-01</td>
<td>24-port TERA-MAX panel, black, 1U</td>
</tr>
<tr>
<td>TM-PNLZ-24</td>
<td>24-port TERA-MAX panel, metallic, 1U</td>
</tr>
<tr>
<td>TM-PNLZA-24-01</td>
<td>24-port Angled TERA-MAX panel, black, 1U</td>
</tr>
<tr>
<td>TM-PNLZA-24</td>
<td>24-port Angled TERA-MAX panel, metallic, 1U</td>
</tr>
<tr>
<td>PNLA-CVR-01</td>
<td>Angled panel cover, black</td>
</tr>
</tbody>
</table>

Panels include designation labels, cable ties, grounding lug and mounting hardware.

Note: TERA-MAX panels are designed for use with hybrid (flat/angled) shielded Z-MAX outlets. Also compatible with TERA outlets.

www.siemon.com
Z-MAX® 6A Shielded Trunking Cable Assemblies

Featuring factory terminated and tested shielded Z-MAX outlets and Siemon Category 6A shielded cable, Z-MAX 6A shielded copper trunking cable assemblies were designed with data center applications in mind, providing high-performance Category 6A performance in a quickly implemented, efficient and cost effective alternative to individual field-terminated components.

**Category 6A F/UTP Cable** — Utilizes high quality Siemon Category 6A F/UTP cable

**Proper Orientation** — Each leg is labeled for proper outlet orientation

**Identification** — Each cable assembly is coded with a unique identification number for administrative purposes

**Quick-Ground™** — Shielded Z-MAX 6A outlets are automatically grounded upon insertion into Z-MAX panels

**Breakout Kit** — Unique breakout kit creates optimal cable orientation and limits cable crossing

**Factory Terminated and Tested** — Utilizes shielded Z-MAX outlets, factory terminated and tested for high performance

**Data Centers**
Ideal for data centers, raised floor and ladder rack environments enabling up to 75% faster deployment time.

**Simple Installation**
Pre-terminated Z-MAX panel outlets utilize a Quick-Snap feature for easy installation and removal from Z-MAX panels.

**Protective Packaging**
Each assembly is packaged individually to protect factory terminations.

**Ordering Information:**

<table>
<thead>
<tr>
<th>Cable Jacket</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>Riser rated (CMR), blue jacket</td>
</tr>
<tr>
<td>P</td>
<td>Plenum rated (CMP), blue jacket</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cable Assembly</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Leg Solid Cable Double-Ended Trunking Cable Assembly</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000-295+</td>
<td>Indicate length in feet (increments of 3 feet)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connector Types</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P7P7</td>
<td>Z-MAX panel outlets for use with Z-MAX panels</td>
</tr>
<tr>
<td>H1H1</td>
<td>Z-MAX hybrid (flat/angled) outlets for use with ZERA-MAX panels</td>
</tr>
<tr>
<td>P7J7</td>
<td>Z-MAX panel outlets to Z-MAX plugs</td>
</tr>
<tr>
<td>H1J7</td>
<td>Z-MAX hybrid flat/angled outlets to Z-MAX plugs</td>
</tr>
</tbody>
</table>

*Standard wiring is T568B. Other lengths and configurations available upon request. Keystone versions also available.*

*Note: These products are made to order. Call for lead time and part number availability in your region.*
Category 6A Shielded BladePatch® Modular Cords

Category 6A shielded BladePatch patch cord offers a unique Category 6A solution for high-density patching environments. It features an innovative push-pull boot design to control the latch, enabling easy access and removal of the cord in tight-fitting areas. The BladePatch cord is ideal for patching blade servers, patch panels, or any equipment with high density RJ-45 outlets.

Universal Compatibility
Fits within any standard RJ-45 outlet.

Revolutionary Latch
Simply push the boot forward to latch into the outlet and pull back to release.

High Density
Ideal for high density data center applications and today’s high-density blade servers.

Easy Access and Removal — RJ-45 patch cord with patent-pending push-pull latch design enables easy access and removal in high density patching environments.

Ordering Information:
Shielded Category 6A BladePatch LSZH, double-ended, RJ-45 modular patch cord with push-pull latching design, color matching cord/boot, T568A/B.

The use of Category 6A shielded BladePatch modular cords will provide Category 6A channel performance if used in a Z-MAX 6A system.

Z-MAX 6A warranty margins do not apply.

www.siemon.com
Category 6A F/UTP 4-Pair Cable (North America)

CABLE CONSTRUCTION
• F/UTP
• 0.57mm (0.023 in.) (23 AWG) solid bare copper
• 7.1mm (0.28 in.) nom. jacket diameter
• Central isolation member
• Shield is an aluminum foil tape enclosing a 0.51mm (0.20 in.) (24 AWG) tinned copper drain wire

COMPLIANCE
• ISO/IEC 11801
• ANSI/TIA-568-C.2
• UL CMR and CSA FT4
• UL CMP and CSA FT6

PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th></th>
<th>CMP</th>
<th>CMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulling Tension (max)</td>
<td>110N (25 lbf)</td>
<td>110N (25 lbf)</td>
</tr>
<tr>
<td>Bend Radius (min)</td>
<td>50mm (2.0 in.)</td>
<td>50mm (2.0 in.)</td>
</tr>
<tr>
<td>Installation Temperature</td>
<td>0 to 60°C (+32 to 140°F)</td>
<td>0 to 60°C (+32 to 140°F)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-20 to 75°C (-4 to 167°F)</td>
<td>-20 to 75°C (-4 to 167°F)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20 to 60°C (-4 to 140°F)</td>
<td>-20 to 60°C (-4 to 140°F)</td>
</tr>
</tbody>
</table>

TRANSMISSION PERFORMANCE

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Insertion Loss (dB)</th>
<th>NEXT (dB)</th>
<th>PS NEXT (dB)</th>
<th>ACR (dB)</th>
<th>PSACR (dB)</th>
<th>ACR-F (dB)</th>
<th>PS ACR-F (dB)</th>
<th>Return Loss (dB)</th>
<th>Propagation Delay (ns)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0*</td>
<td>2.0</td>
<td>1.8</td>
<td>74.3</td>
<td>68.0</td>
<td>72.3</td>
<td>82.3</td>
<td>82.3</td>
<td>72.3</td>
<td>84.2</td>
</tr>
<tr>
<td>4.0</td>
<td>3.8</td>
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<td>65.3</td>
<td>77.0</td>
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<td>65.6</td>
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<td>16.0</td>
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<td>68.0</td>
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<td>46.7</td>
<td>61.1</td>
<td>46.7</td>
</tr>
<tr>
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<td>31.25</td>
<td>10.7</td>
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<td>51.9</td>
<td>64.0</td>
<td>49.9</td>
<td>59.9</td>
<td>41.2</td>
<td>54.1</td>
<td>39.2</td>
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<tr>
<td>62.5</td>
<td>15.4</td>
<td>14.3</td>
<td>47.6</td>
<td>59.0</td>
<td>45.4</td>
<td>55.4</td>
<td>32.0</td>
<td>44.7</td>
<td>30.0</td>
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<tr>
<td>100.0</td>
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<td>18.1</td>
<td>44.3</td>
<td>56.0</td>
<td>42.3</td>
<td>52.0</td>
<td>24.5</td>
<td>37.9</td>
<td>22.5</td>
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<tr>
<td>200.0</td>
<td>29.0</td>
<td>27.3</td>
<td>39.8</td>
<td>52.0</td>
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<td>3.5</td>
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<td>300.0</td>
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<td>35.0</td>
<td>31.7</td>
<td>49.0</td>
<td>35.1</td>
<td>45.0</td>
<td>0.7</td>
<td>14.0</td>
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<td>31.8</td>
<td>42.0</td>
<td>-15.1</td>
<td>5.0</td>
<td>-17.1</td>
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<tr>
<td>550.0*</td>
<td>51.8</td>
<td>43.0</td>
<td>31.2</td>
<td>46.0</td>
<td>31.2</td>
<td>42.0</td>
<td>-18.6</td>
<td>3.0</td>
<td>-20.6</td>
</tr>
<tr>
<td>625.0*</td>
<td>55.6</td>
<td>44.9</td>
<td>32.4</td>
<td>46.0</td>
<td>30.4</td>
<td>41.0</td>
<td>-23.5</td>
<td>1.1</td>
<td>-25.5</td>
</tr>
<tr>
<td>750.0*</td>
<td>62.3</td>
<td>49.0</td>
<td>31.2</td>
<td>45.0</td>
<td>29.2</td>
<td>41.0</td>
<td>-31.3</td>
<td>-4.0</td>
<td>-33.1</td>
</tr>
</tbody>
</table>

*Values for frequencies above industry requirements are for information only.
All performance based on 100 meters (328 ft.).

Ordering Information:
9A6(X)4-A5-(XX)-R1A . . . . . . . . 305m (1000 ft.) Reel (North America Only)

Jacket Color
01 = Black
02 = White
03 = Red
04 = Gray
05 = Yellow
06 = Blue
07 = Green
08 = Violet
09 = Orange

Jacket Material
P = Plenum (CMP, CSA FT6)
R = Riser (CMR, CSA FT4)

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# Category 6A F/UTP 4-Pair Cable (International)

## Cable Construction
- **F/UTP**
- Nominal jacket OD: 6.8 mm
- 0.57mm solid (non-tinned) copper
- Central isolation member
- Shield is an aluminum foil tape enclosing a 0.51mm (24 AWG) tinned copper drain wire

## Ordering Information:
9A6(X)4-A5 . . . . . . . . . . . . . . . . . 305m Reel

## Jacket Material
- **M** = PVC (CM, IEC 60332-1), Gray Jacket
- **R** = Riser (CMR, CSA FT4), Blue Jacket
- **L** = LS0H (IEC 60332-1), Violet Jacket

## Electrical Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>LSOH</th>
<th>CM/CMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulling Tension (max)</td>
<td>110N</td>
<td>110N</td>
</tr>
<tr>
<td>Bend Radius (min)</td>
<td>50mm</td>
<td>50mm</td>
</tr>
<tr>
<td>Installation Temperature</td>
<td>0 to 60°C</td>
<td>0 to 60°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-20 to 75°C</td>
<td>-20 to 75°C</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20 to 75°C</td>
<td>-20 to 75°C</td>
</tr>
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</table>

## Physical Properties

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>DC Resistance Unbalance</th>
<th>Pulling Tension (max)</th>
<th>Bend Radius (min)</th>
<th>Installation Temperature</th>
<th>Storage Temperature</th>
<th>Operating Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0*</td>
<td>5%</td>
<td>110N</td>
<td>50mm</td>
<td>0 to 60°C</td>
<td>-20 to 75°C</td>
<td>-20 to 75°C</td>
</tr>
</tbody>
</table>

## Compliance
- ISO/IEC 11801 (Class EA)
- IEEE 802.3an
- ANSI/TIA-568-C.2 (Category 6A)
- UL CM and IEC 60332-1
- UL CMR and CSA FT4
- LS0H; IEC 60332-1, IEC 60754, IEC 61034

## Transmission Performance

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Insertion Loss (dB)</th>
<th>NEXT (dB)</th>
<th>PS NEXT (dB)</th>
<th>ACR (dB)</th>
<th>PSACR (dB)</th>
<th>ACR-F (dB)</th>
<th>PS ACR-F (dB)</th>
<th>Return Loss (dB)</th>
<th>Propagation Delay (ns)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0*</td>
<td>2.0</td>
<td>1.8</td>
<td>74.3</td>
<td>86.0</td>
<td>72.3</td>
<td>82.3</td>
<td>84.2</td>
<td>70.3</td>
<td>80.5</td>
</tr>
<tr>
<td>4.0</td>
<td>3.8</td>
<td>3.4</td>
<td>65.3</td>
<td>77.0</td>
<td>63.3</td>
<td>73.3</td>
<td>71.5</td>
<td>73.6</td>
<td>59.5</td>
</tr>
</tbody>
</table>

*Values for frequencies above industry requirements are for information only. All performance based on 100 metres
Z-MAX® 6A UTP System Features and Benefits

Siemon’s Z-MAX 6A UTP solution was developed from the ground up with a single goal: shattering the limitations of Category 6A UTP cabling as we know it today. Combining patented PCB-based Smart Plugs, optimized outlets and high-density patch panels, the Z-MAX 6A UTP system provides outstanding margin on all ISO and TIA performance requirements for Category 6A/Class E_A, including critical alien crosstalk parameters.

And, the innovative Z-TOOL™ termination process eliminates the variability of field terminations, providing faster, more user-friendly and less-error-prone Category 6A UTP installations.

Features and Benefits

- High density 48 port, 1U panels provide the flexibility to maximize rack/cabinet space while maintaining excellent alien crosstalk isolation
- Industry’s fastest termination time accelerates project completion
- Guided, tool-based termination process enhances system quality and reliability
- Hybrid work area outlets can be mounted in either flat or angled orientation
- Field-terminated outlets or pre-terminated trunking cables can be quickly snapped into patch panels and released enabling rapid deployment or changes
- Outlet and modular cord color-coding provides the capability to code and customize your cabling system
System Performance Overview

Standards Compliance

- ISO/IEC 11801 Class E_A
- ISO/IEC 11801 2nd ed Amendment 1
- ISO/IEC 11801 2nd ed Amendment 2
- IEC 60603-7
- TIA-968-A (formerly FCC Part 68 Subpart F)
- ANSI/TIA-568-C.2
- ETL Tested
- IEEE 802.3an
- IEEE 802.3af (PoE)
- IEEE 802.3at (PoE+)
- UL-listed

Z-MAX 6A Channel UTP Performance

GUARANTEED 4-CONNECTOR CHANNEL MARGINS TO ISO / IEC 11801 2.1 (1 - 500 MHz)

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>IL</td>
<td>3%</td>
</tr>
<tr>
<td>NEXT</td>
<td>3.0 dB</td>
</tr>
<tr>
<td>PSNEXT</td>
<td>3.5 dB</td>
</tr>
<tr>
<td>ACR-F</td>
<td>7 dB</td>
</tr>
<tr>
<td>PSACR-F</td>
<td>10 dB</td>
</tr>
<tr>
<td>RL</td>
<td>3 dB</td>
</tr>
<tr>
<td>PSANEXT</td>
<td>1 dB</td>
</tr>
<tr>
<td>PSAACR-F</td>
<td>1 dB</td>
</tr>
<tr>
<td>ACR-N</td>
<td>6 dB</td>
</tr>
<tr>
<td>PSAACR-N</td>
<td>6.5 dB</td>
</tr>
</tbody>
</table>

Performance is based on the use of 24 x 2M cords and 24 port/1U density.
Z-MAX® 6A UTP Outlets

The Category 6A UTP Z-MAX outlet offers best-in-class performance in every critical specification, exceeding all Category 6A performance requirements, including alien crosstalk. Its innovative features not only accelerate and simplify termination, but remove installation variability for consistently high and repeatable performance — every termination, every time!

- **Compact** — Slim and side-stackable for high-density applications. Supports “pass-thru” feature to mount from the front or rear of a faceplate
- **Enclosed IDC Terminations** — IDC terminations are fully enclosed in the outlet housing for robust protection
- **Flexible IDC alignment** maximizes outlet to outlet pair separation to achieve AXT performance in high-density environments.
- **High-visibility Icon System** — Printed icons allow designation for voice / data applications and also provide an additional color-coding option
- **Robust Hinged Cable Retention** — Hinged clip accommodates multiple cable diameters
- **Guided Termination Features** — Lacing channels guide correct conductor placement while 2-sided color-coding provides wiring verification before and after lacing
- **Fastest Termination Time** — Zero-Cross™ termination module and 2-step Z-TOOL™ termination process combine for best-in-class termination time
- **Enclosed IDC Terminations** — IDC terminations are fully enclosed in the outlet housing for robust protection
- **Compact** — Slim and side-stackable for high-density applications. Supports “pass-thru” feature to mount from the front or rear of a faceplate
- **Bayonet Style** — Fast and secure termination with easy “push through” installation
- **High-visibility Icon System** — Printed icons allow designation for voice / data applications and also provide an additional color-coding option
- **Robust Hinged Cable Retention** — Hinged clip accommodates multiple cable diameters
- **Guided Termination Features** — Lacing channels guide correct conductor placement while 2-sided color-coding provides wiring verification before and after lacing
- **Fastest Termination Time** — Zero-Cross™ termination module and 2-step Z-TOOL™ termination process combine for best-in-class termination time

**Ordering Information:**

Z6A-(X)(XX)(X) . . . . . . . . UTP Z-MAX 6A outlet, T568A/B

<table>
<thead>
<tr>
<th>Mounting Style</th>
<th>Bezel Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Blank) = Hybrid Flat/Angled</td>
<td>01 = Black 06 = Blue</td>
</tr>
<tr>
<td>K = Keystone</td>
<td>02 = White 07 = Green</td>
</tr>
<tr>
<td>03 = Red 09 = Orange</td>
<td>04 = Gray 20 = Ivory</td>
</tr>
<tr>
<td>05 = Yellow 80 = Light Ivory</td>
<td></td>
</tr>
</tbody>
</table>

Outlet terminates UTP cable constructions with 23 – 26 AWG (0.64 – 0.51mm) solid and 26 AWG (0.48mm) stranded conductors, with up to 0.60mm diameter conductors and up to 1.48mm diameter over insulation.

Add “B” to end of part number for bulk project pack of 100 modules (hybrid modules include icons).

Each Z-MAX 6A UTP hybrid flat/angled outlet includes 1 printed icon set with the following color/print options.

For more Z-MAX icon colors and options see page 8.5.
Z-MAX® 6A UTP Modular Cords

Combining the unparalleled performance of an exclusive PCB-based smart plug, alien crosstalk resistant construction and a host of innovative end-user features, Z-MAX 6A UTP modular cord sets the bar for Category 6A UTP patching.

**High Performance Cable** — Z-MAX 6A UTP cords feature dual jacket construction for excellent alien crosstalk performance.

**Solid Cord Option** — Solid UTP cords are available for consolidation point and equipment cord applications.

**Low Profile Boot Design** — Optimizes side-stackability of modular cords and allows use in even the most dense equipment.

**Colored Clips**
Removable clips allow field color coding even when cords are connected.

**100% Factory-Tested**
Cords are 100% transmission tested to ensure compliance with applicable standards requirements.

**Solid Cord Option**
Solid F/UTP assemblies are available for consolidation point and equipment cord applications.

### Ordering Information:

<table>
<thead>
<tr>
<th>ZM6A-(XX)-(XX)</th>
<th>Z-MAX 6A UTP, double-ended, stranded modular cord, clear boot, T568A/B, CMG</th>
</tr>
</thead>
</table>

**Length**
- **03** = 0.9m (3 ft.)
- **05** = 1.5m (5 ft.)
- **07** = 2.1m (7 ft.)
- **10** = 3.1m (10 ft.)
- **15** = 4.6m (15 ft.)
- **20** = 6.1m (20 ft.)

**Jacket Color**
- **01** = Black
- **02** = White
- **03** = Red
- **04** = Gray
- **05** = Yellow
- **06** = Blue
- **07** = Green

**ZD6A-(XX)(X)-(X)(X)** | Z-MAX 6A UTP, solid modular cord, blue jacket, clear boot

**Length**
- **10** = 3.1m (10 ft.)
- **20** = 6.1m (20 ft.)
- **30** = 9.1m (30 ft.)
- **40** = 12.2m (40 ft.)
- **50** = 15.2m (50 ft.)
- **60** = 18.3m (60 ft.)

**Plugs**
- **(Blank)** = Single-ended
- **D** = Double-ended (T568A/B)

**Jacket**
- **R** = CMR
- **P** = CMP

**Wiring**
- **A** = T568B
- **T** = T568A

**CLIP-(XX)** | Color coding clip, bag of 25

**Clip Color**
- **01** = Black
- **02** = White
- **03** = Red
- **04** = Gray
- **05** = Yellow
- **06** = Blue
- **07** = Green
- **08** = Violet
- **09** = Orange

Add “B” to end of part number for bulk project pack of 100 cords.

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Z-MAX® 6A UTP Patch Panels

Z-MAX patch panels provide outstanding 10 Gb/s performance and aesthetics in a high-density, modular UTP solution. The Z-MAX UTP panels provide rapid and reliable installation by accelerating module mounting, and cable tie-down operations.

In addition to traditional 24 port / 1U flat and angled versions, the Z-MAX UTP panels are also available in 48 port / 1U configurations to permit high density installations.

High-Density — Provides 48 ports in just 1U while still meeting strict Category 6A Alien Crosstalk parameter

Port Identification — High visibility magnifying labeling system enables quick identification of outlets

Durable — High strength steel with black finish and scratch/fade resistant port marking

Aesthetics — The Z-MAX panel provides a clean front surface to improve the installation appearance

Installation Friendly — Quick-Snap feature allows outlets to quickly be snapped into place

Kits
Panels available as complete kits including patch panel, Z-MAX panel outlets and all necessary accessories. Empty panels are also available for use with Z-MAX trunk assemblies.

Ideal for Trunking Applications
Combine Z-MAX trunk assemblies (with preterminated panel outlets) and empty Z-MAX panels for rapid data center deployment.

Integrated Cable Management
Ensures proper cable management practices for all installations, critical to Category 6A performance.

Note: Z-MAX UTP patch panels are designed for use with Z-MAX UTP panel outlets only

Panel Accessories:

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z-PNL-PL24</td>
<td>Patch panel label sheet, numbered 1 to 24, bag of 100</td>
</tr>
<tr>
<td>Z-PNL-PL48</td>
<td>Patch panel label sheet, numbered 25 to 48, bag of 100</td>
</tr>
<tr>
<td>Z-PNL-P5</td>
<td>Patch panel label holder, bag of 25</td>
</tr>
<tr>
<td>Z6A-P</td>
<td>Z-MAX 6A UTP panel outlet</td>
</tr>
<tr>
<td>PNL-CVR-01</td>
<td>Angled panel cover, black</td>
</tr>
<tr>
<td>Z-BL-01</td>
<td>Z-MAX panel blank, bag of 10, black</td>
</tr>
</tbody>
</table>

Note: 1U = 44.5mm (1.75 in.) included in kit only
Siemon’s Z-MAX 6A UTP trunking cable assemblies provide an easily installed and cost effective alternative to individual field-terminated channels. Combining factory terminated and tested Z-MAX outlets with Siemon’s Category 6A UTP cable in a high-performance modular cable assembly, Z-MAX 6A UTP trunking cable assemblies are designed to simplify the installation of Category 6A systems in data centers and other high-density high-performance environments.  

**Identification** — Each cable assembly is coded with a unique identification number for administrative purposes  
**Siemon Category 6A UTP Cable** — Utilizes high quality Siemon Category 6A UTP cable  
**Proper Orientation** — Each leg is cut and labeled for proper module orientation  
**Breakout Kit** — Unique breakout kit creates optimal cable orientation and limits cable crossing  
**Factory Terminated and Tested** — Utilizes Z-MAX 6A UTP outlets, factory terminated and tested for high performance  

**Ordering Information:**

```
TD(X)D6E-(XXXX)(XXX)F . . . . . 6 Leg Solid Cable Double-Ended Trunking Cable Assembly
```

**Cable Jacket**

- **R** = Riser rated (CMR, CSA FT6), blue jacket  
- **P** = Plenum rated (CMP, CSA FT4), blue jacket  

**Length**

```
009-295 = Indicate length in feet (increments of 3 feet)
```

**Connector Types**

- **POPO** = Z-MAX panel outlets for use with Z-MAX panels  
- **H1H1** = Z-MAX hybrid flat/angled outlet  
- **POJ0** = Z-MAX panel outlets to Z-MAX plugs  
- **H1J0** = Z-MAX hybrid flat/angled outlet to Z-MAX plugs

Standard wiring is T568B. Other lengths and configurations available upon request. Keystone versions also available.

**Note:** These products are made to order. Call for lead time and part number availability in your region.

www.siemon.com
Category 6A UTP BladePatch® Modular Cords

Siemon’s Category 6A UTP BladePatch patch cord offers a unique Category 6A solution for high-density patching environments. It features an innovative push-pull boot design to control the latch, enabling easy access and removal of the cord in tight-fitting areas.

The BladePatch cord is ideal for patching blade servers, patch panels, or any equipment with high density RJ-45 outlets.

- Universal Compatibility: Fits within any standard RJ-45 outlet.
- Revolutionary Latch: Simply push the boot forward to latch into the outlet and pull back to release.
- High Density: Ideal for high density data center applications and today’s high-density blade servers.
- Easy Access and Removal: RJ-45 patch cord with patent-pending push-pull latch design enables easy access and removal in high density patching environments.
- Low Profile Boot Design: Optimizes side-stacking ability of patch cords and allows use in even the most dense equipment.
- Push-Pull Boot Activates Latch.
- High Performance: Cords feature Category 7 S/FTP stranded cable for optimal transmission performance while eliminating alien crosstalk.
- Snagless: Push-pull latch design eliminates external thumb latch used in standard modular plug designs which can snag and break.

Ordering Information:

Category 6A BladePatch double ended, 4-pair UTP stranded modular cord with push-pull latching design, color matching cord/boot, T568A/B, CMG

<table>
<thead>
<tr>
<th>Cord Length</th>
<th>Cord Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>03 = 0.9m (3 ft.)</td>
<td>01 = Black</td>
</tr>
<tr>
<td>05 = 1.5m (5 ft.)</td>
<td>02 = White</td>
</tr>
<tr>
<td>07 = 2.1m (7 ft.)</td>
<td>03 = Red</td>
</tr>
<tr>
<td>10 = 3.1m (10 ft.)</td>
<td>04 = Grey</td>
</tr>
<tr>
<td>15 = 4.6m (15 ft.)</td>
<td>05 = Yellow</td>
</tr>
<tr>
<td>20 = 6.1m (20 ft.)</td>
<td>06 = Blue</td>
</tr>
<tr>
<td></td>
<td>07 = Green</td>
</tr>
<tr>
<td></td>
<td>08 = Violet</td>
</tr>
<tr>
<td></td>
<td>09 = Orange</td>
</tr>
</tbody>
</table>

The use of Category 6A UTP BladePatch modular cords will provide Category 6A channel performance if used in a Z-MAX 6A system.

Z-MAX 6A warranty margins do not apply.
Category 6A UTP Cable (North America)

**CABLE CONSTRUCTION**
- UTP
- CMP Nominal Cable O.D: 7.9mm (0.31 in.)
- CMR Nominal Cable O.D: 8.3mm (0.326 in.)
- 0.58mm (0.022 in.) (23 AWG) solid bare copper
- Round jacket with Internal Longitudinal Striations (ILS)

**COMPLIANCE**
- ISO/IEC 11801
- ANSI/TIA-568-C.2
- UL CMR and CSA FT4
- UL CMP and CSA FT6

**Ordering Information:**
9C6(X)4-A5-(XX)-AR1A . . . . . . . 305m (1000 ft.) Reel

**PHYSICAL PROPERTIES**

<table>
<thead>
<tr>
<th></th>
<th>CMP</th>
<th>CMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulling Tension (max)</td>
<td>110N (25 lbf)</td>
<td>110N (25 lbf)</td>
</tr>
<tr>
<td>Bend Radius (min)</td>
<td>34mm (1.3 in.)</td>
<td>34mm (1.3 in.)</td>
</tr>
<tr>
<td>Installation Temperature</td>
<td>0 to 50°C (+32 to 122°F)</td>
<td>0 to 50°C (+32 to 122°F)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-20 to 75°C (-4 to 167°F)</td>
<td>-20 to 75°C (-4 to 167°F)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20 to 60°C (-4 to 140°F)</td>
<td>-20 to 60°C (-4 to 140°F)</td>
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</table>

**TRANSMISSION PERFORMANCE**

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Insertion Loss (dB)</th>
<th>NEXT (dB)</th>
<th>PS NEXT (dB)</th>
<th>ACR (dB)</th>
<th>PSACR (dB)</th>
<th>ACR-F (dB)</th>
<th>PS ACR-F (dB)</th>
<th>Return Loss (dB)</th>
<th>Propagation Delay (ns)</th>
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</thead>
<tbody>
<tr>
<td>1.0</td>
<td>2.1</td>
<td>74.3</td>
<td>72.2</td>
<td>70.2</td>
<td>67.8</td>
<td>64.8</td>
<td>20.0</td>
<td>570</td>
<td></td>
</tr>
<tr>
<td>4.0</td>
<td>3.8</td>
<td>65.3</td>
<td>63.3</td>
<td>61.5</td>
<td>59.5</td>
<td>57.7</td>
<td>53.7</td>
<td>23.0</td>
<td>352</td>
</tr>
<tr>
<td>10.0</td>
<td>5.9</td>
<td>59.3</td>
<td>57.3</td>
<td>55.4</td>
<td>53.4</td>
<td>51.4</td>
<td>47.8</td>
<td>25.0</td>
<td>545</td>
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<tr>
<td>16.0</td>
<td>7.5</td>
<td>56.2</td>
<td>54.2</td>
<td>52.8</td>
<td>50.8</td>
<td>48.8</td>
<td>47.3</td>
<td>25.0</td>
<td>543</td>
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<tr>
<td>20.0</td>
<td>8.4</td>
<td>54.8</td>
<td>52.8</td>
<td>51.4</td>
<td>49.4</td>
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<td>46.7</td>
<td>25.0</td>
<td>542</td>
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<tr>
<td>31.25</td>
<td>10.5</td>
<td>51.9</td>
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<td>48.4</td>
<td>46.4</td>
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<td>62.5</td>
<td>15.0</td>
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<td>45.4</td>
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<td>41.4</td>
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<td>37.9</td>
<td>23.6</td>
<td>540</td>
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<tr>
<td>100.0</td>
<td>19.1</td>
<td>44.3</td>
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<td>34.9</td>
<td>21.5</td>
<td>539</td>
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<tr>
<td>200.0</td>
<td>27.6</td>
<td>39.8</td>
<td>37.8</td>
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<td>34.3</td>
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<td>30.9</td>
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<td>32.3</td>
<td>31.3</td>
<td>29.9</td>
<td>20.0</td>
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<tr>
<td>300.0</td>
<td>34.3</td>
<td>37.1</td>
<td>35.1</td>
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<td>31.1</td>
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<td>350.0</td>
<td>37.2</td>
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<td>32.1</td>
<td>30.1</td>
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<td>26.3</td>
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<tr>
<td>500.0*</td>
<td>45.3</td>
<td>33.8</td>
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<td>27.8</td>
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<td>24.8</td>
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<td>625.0*</td>
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<td>750.0*</td>
<td>56.7</td>
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<td>23.2</td>
<td>22.2</td>
<td>15.0</td>
<td>535</td>
</tr>
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</table>

*Guaranteed WORSE CASE

*Performance for frequencies beyond TIA requirements are for information only.

All performance based on 100 meters (328 ft.).
Category 6A UTP Cable (International)

**COMPLIANCE**
- ISO/IEC 11801 Ed. 2.2 (Class E2a)
- ISO/IEC 61156-5
- IEEE 802.3an
- TIA-568-C.2 (Category 6A)
- LSZH: ISO/IEC 60332, IEC 60754, IEC 61034

**CABLE CONSTRUCTION**
- UTP
- Nominal jacket OD: 8.5mm
- 0.58mm solid (non-tinned) copper
- Center Isolation Member

**ELECTRICAL SPECIFICATIONS**

<table>
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<th>Parameter</th>
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<td>Characteristic Impedance</td>
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<td>Capacitance Unbalance</td>
<td>&lt;330 pf/m</td>
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<tr>
<td>Insertion Loss (dB)</td>
<td>2.2</td>
</tr>
<tr>
<td>PS NEXT (dB)</td>
<td>4.0</td>
</tr>
<tr>
<td>ACR-F (dB)</td>
<td>20.0</td>
</tr>
<tr>
<td>UTP DC Resistance</td>
<td>&lt;3.8 ohm/m</td>
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<tr>
<td>UTP DC Resistance Unbalance</td>
<td>5%</td>
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<tr>
<td>NVP</td>
<td>67%</td>
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**PHYSICAL PROPERTIES**

<table>
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<th>Parameter</th>
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<tr>
<td>Pulling Tension (max)</td>
<td>110N</td>
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<tr>
<td>Bend Radius (min)</td>
<td>45.7mm</td>
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<tr>
<td>Installation Temperature</td>
<td>-20 to 75°C</td>
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<tr>
<td>Storage Temperature</td>
<td>0 to 60°C</td>
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**TRANSMISSION PERFORMANCE**

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Insertion Loss (dB)</th>
<th>NEXT (dB)</th>
<th>PS NEXT (dB)</th>
<th>ACR-F (dB)</th>
<th>ACR-F (dB)</th>
<th>Return Loss (dB)</th>
<th>Propagation Delay (ns)</th>
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<tr>
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<td>68.0</td>
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<td>32.5</td>
<td>10.8</td>
<td>49.2</td>
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</tbody>
</table>

*Values for frequencies above industry requirements are for information only. All performance based on 100 metres.

**Ordering Information:**

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<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9C6L4-A5</td>
<td>LSZH (IEC 60332-1), violet jacket, 305m Reel</td>
</tr>
</tbody>
</table>
Category 6 UTP

Siemon offers multiple systems levels of system performance based on our high-performance Category 6 connectivity.

- Paired with Siemon Premium 6™ UTP cable, our connectivity provides a warranted, end-to-end Premium 6 UTP cabling solution. Premium 6 exhibits exceptional margin on all parameters beyond category 6 — exceeding connecting hardware and channel performance specifications set forth for category 6/class E by the TIA and ISO/IEC
- With the use of Siemon’s Z-MAX® 6 UTP outlets, Siemon’s Z-MAX Premium 6 System provides margins beyond those of Premium 6, offering industry leading category 6 system performance
- Utilized with Siemon System 6™ UTP cable, Siemon category 6 connectivity offers excellent performance/price value in an end-to-end system that meets or exceed all category 6 parameters
- When deployed with Solution 6™ UTP cable, Siemon category 6 connectivity delivers a very cost-effective, standards-compliant system designed for installations where the additional performance headroom of Premium 6 and System 6 is not required

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- Z-MAX 6 UTP Patch Panels ................................. 3.4
- HD® 6 UTP Patch Panels ................................... 3.5 - 3.6
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Z-MAX® 6 UTP Outlets

The Category 6 UTP Z-MAX outlet offers best-in-class performance exceeding all Category 6 performance requirements. Its innovative features not only accelerate and simplify termination, but remove installation variability for consistently high and repeatable performance - every termination, every time! This consistency eliminates troubleshooting time due to marginal passes during field testing.

**Compact** — Slim and side-stackable for high-density applications. Supports “pass-thru” feature to mount from the front or rear of a faceplate.

**Guided Termination Features** — Lacing channels guide correct conductor placement while 2-sided color-coding provides wiring verification before and after lacing.

**Enclosed IDC Terminations** — IDC terminations are fully enclosed in the outlet housing for robust protection.

**Robust Hinged Cable Retention** — Hinged clip accommodates multiple cable diameters.

**Fastest Termination Time** — Zero-Cross™ termination module and 2-step Z-TOOL™ termination process combine for best-in-class termination time.

**High-Visibility Icon System** — Printed icons allow designation for voice / data applications and also provide an additional color coding option.

**Compact** — Slim and side-stackable for high-density applications. Supports “pass-thru” feature to mount from the front or rear of a faceplate.

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**Robust Hinged Cable Retention** — Hinged clip accommodates multiple cable diameters.

**Fastest Termination Time** — Zero-Cross™ termination module and 2-step Z-TOOL™ termination process combine for best-in-class termination time.

**High-Visibility Icon System** — Printed icons allow designation for voice / data applications and also provide an additional color coding option.

**Flexibility and Simplified Ordering**

A single hybrid outlet supports both angled and flat mounting orientations.

**Spring Door Option**

Minimizes exposure to dust and other contaminants.

Ordering Information:

Z6-XXXXXX . . . . . . . . . . UTP Z-MAX 6 outlet, T568A/B

<table>
<thead>
<tr>
<th>Mounting Style</th>
<th>Bezel Colour</th>
<th>Door Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Blank) = Hybrid Flat/Angled</td>
<td>01 = Black</td>
<td>(Blank) = No Door</td>
</tr>
<tr>
<td>K = Keystone</td>
<td>02 = White</td>
<td>D = Door (Hybrid only)</td>
</tr>
<tr>
<td></td>
<td>03 = Red</td>
<td></td>
</tr>
<tr>
<td></td>
<td>04 = Gray</td>
<td></td>
</tr>
<tr>
<td></td>
<td>05 = Yellow</td>
<td></td>
</tr>
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<td></td>
<td>06 = Blue</td>
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</tr>
<tr>
<td></td>
<td>07 = Green</td>
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</tr>
<tr>
<td></td>
<td>08 = Orange</td>
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<td></td>
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<tr>
<td></td>
<td>11 = Green</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12 = Orange</td>
<td></td>
</tr>
</tbody>
</table>

Outlet terminates UTP cable constructions with 23 – 26 AWG (0.64 – 0.51mm) solid and 26 AWG (0.48mm) stranded conductors, with up to 0.60mm diameter conductors and up to 1.48mm diameter over insulation.

Add “D” to end of part number for spring door option. (Hybrid only)

Add “B” to end of part number for bulk project pack of 100 modules (hybrid modules include icons).

Note: Z-MAX outlets utilise the Z-TOOL termination tool. Included with each standard pack of Z-MAX outlets.

Note: Keystone version is designed for integration with various international mounting products and is not compatible with MAX® mounting hardware.

www.siemon.com
MAX® 6 UTP Outlets

Part of Siemon’s category 6 UTP end-to-end Cabling Solution, the MAX 6 outlet exceeds category 6 connecting hardware performance specifications.

It’s compact design is ideal for high density applications. Up to six outlets can be utilized in a single gang faceplate and twelve outlets in a double gang faceplate. Also, the angled MAX outlet provides a gravity feed, low-profile design for the work area — greatly improving cable management in installations where front or rear clearance is at a minimum.

Quick Installation
Pyramid wire entry system on S310 blocks separates paired conductors when lacing cables to simplify and reduce installation time.

Termination
Siemon’s Palm Guard with MAX insert (p/n: PG-MX6) assists in securing outlet during termination.

Flexible Installation — Install from either front or rear of faceplate

Easy Termination — Punch down with standard 110 termination tools

Universal Wiring — T568A and T568B wiring compatible

Backward Compatible — With category 5e/class D system components

Protective Doors — Minimize exposure to dust and other contaminants (doors not shown)

Quick Identification — Colored Icons provided for port identification

MAX 6 UTP Modules

MX6-(XX) . . . . . . . . . . . . . . . . . . . Category 6 Angled MAX outlet, T568A/B, rear strain relief cap and protective color-matching rubber door*

MX6-F(XX) . . . . . . . . . . . . . . . . . . . Category 6 Flat MAX outlet, T568A/B, rear strain relief cap

MX6-K(XX) . . . . . . . . . . . . . . . . . . . Category 6 Keystone MAX outlet, T568A/B, rear strain relief cap

Use (XX) to specify color: 01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green, 09 = orange, 20 = ivory, 25 = bright white, 80 = light ivory
Angled outlets include one color-matching, one red, and one blue icon.
*Door color is clear for red, yellow, blue and orange angled outlets.
Flat outlets include one color-matching, one red, and one blue icon.
Add “B” to end of part number for bulk project pack of 100 outlets (angled and flat outlets include icons).
Add “VP” to end of part number for value pack option. Value pack is a kit of 250 jacks, doors, terms caps and color match icons. (Available in flat/angled only. Door only included with angled version.)
Note: Keystone version is designed for integration with various international mounting products and is not compatible with MAX mounting hardware.
CT® 6 UTP Couplers

Angled CT 6 Couplers

Siemon’s patented gravity-feed jack controls the bend radius of the mated modular cords to ensure the integrity of the transmission channel, while physically protecting the connection from incidental contact at the work area. The angled shroud creates a slim profile, perfect for installations in shallow raceways and modular furniture.

CT-C6-C6-(XX) . . . . . . . . . . . . . . .
Angled, double coupler,
T568A/B

CT-C6-(XX) . . . . . . . . . . . . . . .
Angled, single coupler,
T568A/B

Technical Tip!
Angled couplers are recommended for work area applications.

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory, 82 = alpine white
Add “D” for spring door option.
Add “B” to end of part number for bulk project pack of 100 couplers.
(Bulk option includes couplers, icons, and termination caps. Cable ties are available separately.)
Couplers include one color-matching icon (clear for black) and one termination cap per port, plus one red and one blue icon.

Flat CT 6 Couplers

Flat CT 6 couplers are designed for use in flush mount applications and are also recommended for use with CT patch panels.

CT-F-C6-C6-(XX) . . . . . . . . . . . . . .
Flat, double coupler,
T568A/B

CT-F-C6-(XX) . . . . . . . . . . . . . . .
Flat, single coupler,
T568A/B

Technical Tip!
Flat couplers are recommended for patch panel applications.

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory.
Add “B” to end of part number for bulk project pack of 100 couplers.
(Bulk option includes couplers, icons, and termination caps. Cable ties are available separately.)
Couplers include one color-matching icon (clear for black) and one termination cap per port, plus one red and one blue icon.

www.siemon.com
Z-MAX® 6 UTP Patch Panels

Z-MAX patch panels provide outstanding performance and aesthetics in a high-density, modular UTP solution. The Z-MAX UTP panels provide rapid and reliable installation by accelerating outlet mounting, and cable tie-down operations.

In addition to traditional 24-port / 1U flat and angled versions, the Z-MAX UTP panels are also available in 48-port / 1U configurations for ultra high density installations.

**High-Density** — Provides 24 or 48 ports in just 1U

**Installation Friendly** — Quick-Snap feature allows outlets to quickly be snapped into place

**Aesthetics** — The Z-MAX panel provides a clean front surface to improve the installation appearance

**Port Identification** — High visibility magnifying labeling system enables quick identification of outlets

**Durable** — Lightweight, high strength steel with black finish and scratch/fade resistant port marking

**NOTE:** Z-MAX UTP patch panels are designed for use with Z-MAX UTP panel outlets only

### Ordering Information:

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<th>Description</th>
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<tbody>
<tr>
<td>Z6-PNL(X)-24K</td>
<td>Z-MAX 24-Port, category 6 UTP patch panel, 1 RMS, black with outlets</td>
</tr>
<tr>
<td>Z6-PNL(X)-U48K</td>
<td>Z-MAX 48-Port, category 6 UTP patch panel, 1 RMS, black, with outlets</td>
</tr>
<tr>
<td>Z-PNL(X)-24E</td>
<td>Z-MAX 24-Port UTP patch panel, 1RMS, black, empty</td>
</tr>
<tr>
<td>Z-PNL(X)-U48E</td>
<td>Z-MAX 48-Port UTP patch panel, 1RMS, black, empty</td>
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</table>

Use (X) to specify mounting style: (Blank) = Flat, A = Angled

### Panel Accessories:

<table>
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<th>Part #</th>
<th>Description</th>
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<tr>
<td>Z-PNL-PL24</td>
<td>Patch panel label sheet, numbered 1 to 24, bag of 100</td>
</tr>
<tr>
<td>Z-PNL-PL48</td>
<td>Patch panel label sheet, numbered 25 to 48, bag of 100</td>
</tr>
<tr>
<td>Z-PNL-PS</td>
<td>Patch panel label holder, (6 port ea.) bag of 25</td>
</tr>
<tr>
<td>Zb-P</td>
<td>Z-MAX 6 UTP panel outlet</td>
</tr>
<tr>
<td>Z-BL-01</td>
<td>Z-MAX panel blank, bag of 10, black</td>
</tr>
</tbody>
</table>

Panels include Z-TOOL®, label / icon holders, designation labels, cable ties, and mounting hardware. Note: 1U = 44.5mm (1.75 in.)* included in kit only

**Integrated Cable Management**
Ensures proper cable management practices for all installations

**Ideal for Trunking Applications**
Combine Z-MAX trunk assemblies (with panel outlets) and empty Z-MAX panels for rapid data center deployment

**Kits**
Panels available as complete kits including patch panel, Z-MAX panel outlets, Z-TOOL and all necessary accessories. Empty panels are also available for use with Z-MAX trunk assemblies

---

*www.siemon.com*
**HD® 6 UTP Patch Panels**

Siemon’s HD 6 patch panel was the industry’s first patch panel to exceed category 6 connecting hardware specifications for all pair combinations up to 250 MHz. Get superior performance and user-friendly termination, labeling, and cable management features with Siemon’s popular category 6 patch panel.

- **Universal Wiring** — HD 6 patch panels feature universal wiring for both T568A/B compatible with standard 110 style single position punch tool.
- **Installer Friendly** — Icon label holders and designation labels included.
- **Standard Fit** — Panels can be mounted directly on standard 19 inch relay rack or cabinet.
- **Aesthetics** — Front surface is uninterrupted by screw heads for a clean appearance.
- **Port Identification** — Bold port numbering enables quick identification of outlets.
- **Cable Management** — Includes built-in cable manager to properly guide cables to point of termination.
- **Pyramid™ Wire Entry System** — Pyramid wire entry system on S310 blocks separates paired conductors when lacing cables to reduce installation time.
- **Circuit Protection** — Rear metal enclosure protects printed circuitry.
- **Universal Wiring**
- **HD™ 6 Angled Patch Panels**

### HD® 6 Flat Patch Panels

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD6-16</td>
<td>16-port category 6 UTP HD patch panel, 1U</td>
</tr>
<tr>
<td>HD6-24</td>
<td>24-port category 6 UTP HD patch panel, 1U</td>
</tr>
<tr>
<td>HD6-48</td>
<td>48-port category 6 UTP HD patch panel, 2U</td>
</tr>
<tr>
<td>HD6-96</td>
<td>96-port category 6 UTP HD patch panel, 4U</td>
</tr>
</tbody>
</table>

Panels include rear cable manager(s), icon/label holders, designation labels, cable ties, and mounting hardware.

1. Add “R” for bulk project pack of 5 panels (rear cable managers (p/n: HD-RWM) not included but can be ordered separately).

Note: 1U = 44.5mm (1.75 in.)

S310 termination blocks are not compatible with S110™ multi-pair termination tools.

### HD® 6 Angled Patch Panels

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD6-24A</td>
<td>24-port angled panel, T568A/B wiring, 1 RMS</td>
</tr>
<tr>
<td>HD6-48A</td>
<td>48-port angled panel, T568A/B wiring, 2 RMS</td>
</tr>
<tr>
<td>PNLA-CVR-01</td>
<td>Angled panel cover, black</td>
</tr>
</tbody>
</table>

Angled panels include one rear cable manager, designation labels, cable ties, and mounting hardware.

1. Add “R” for bulk project pack of 5 panels (rear cable managers not included but can be ordered separately).

Note: 1 RMS = 44.5mm (1.75 in.)

[www.siemon.com](http://www.siemon.com)
12-Port HD® 6 Mounted on S89D Bracket

The HD6-89 offers an economical solution for small applications and is ideal for retrofitting S66™ punch down blocks to a high performance modular design.

Part # Description
HD6-89D-12. 12-port HD 6 panel, T568A/B, mounted on S89D bracket

- Height: 254.0mm (10.0 in)
- Width: 85.9mm (3.38 in)
- Depth: 60.2mm (2.37 in)

HD Panel Accessories

Part # Description
HD-RWM . . . . Rear cable management bracket for HD patch panels (not compatible with HD5-S-24)

HD5-ICON6-LBL. 10 sheets of labels for HD5-ICON6 for laser printing (48 labels per sheet)*

HD5-LBL-480 . . Adhesive strips for sequentially numbering panel ports 1 through 480 for 24-, 48-, or 96-port panels

HD5-LBL6-2 . . . White removable designation strips in a package of eight for 24-, 48-, or 96-port panels

HD5-ICON6 . . . Adhesive-backed strips in a package of 8 for color-coding and port designation for 24-, 48-, or 96-port panels (icons not included)

CT-ICON-(XX) . . . 25 colored icon tabs (phone on one side, computer on reverse)

Use (XX) to specify color: 00 = clear (TAB-XX only), 01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green, 08 = violet, 09 = orange, 20 = ivory, 25 = bright white, 60 = brown, 80 = light ivory

Add “B” for bulk pack of 100 icons.

*Visit our web site or contact our Technical Support Department for labeling software.
MAX® Patch Panels

MAX patch panels provide a flexible, high density termination solution for the telecommunications room. Using the full line of Z-MAX® or MAX modules (available separately), the panel can be configured for a variety of multimedia applications. Blank modules can be used to reserve ports for future capacity.

Siemon’s MAX series angled patch panels route cables directly into the vertical cable managers eliminating the need for horizontal cable management between panels.

Installation Friendly
Individual modules snap into place from front or rear of panel for added installation flexibility.

Designation labels
Removable designation labels can be laser printed and enable proper circuit identification for each port.

Cable Management
Rear cable management bar included for routing horizontal cables to terminations.

Eliminates Horizontal Cable Managers
Angled panels route patch cords directly into vertical cable managers saving valuable rack space.
**MAX® Patch Panels**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MX-PNL-16</td>
<td>16-port MAX patch panel, 1U</td>
</tr>
<tr>
<td>MX-PNL-24</td>
<td>24-port MAX patch panel, 1U</td>
</tr>
</tbody>
</table>

Panels include rear cable manager, designation labels, cable ties, and mounting hardware.

MAX Panels are not compatible with shielded MAX or shielded Z-MAX modules. Use the TERA-MAX or Z-MAX shielded panel.

Note: 1U = 44.5mm (1.75 in.)

**Angled MAX Patch Panels**

Siemon's MAX series angled patch panels route cables directly into the vertical cable managers, eliminating the need for horizontal cable management between panels.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MX-PNLA-24</td>
<td>24-port angled MAX patch panel, 1U</td>
</tr>
<tr>
<td>MX-PNLA-48</td>
<td>48-port angled MAX patch panel, 2U</td>
</tr>
</tbody>
</table>

Angled MAX panels are not compatible with shielded Z-MAX or shielded MAX modules. Use the TERA-MAX or Z-MAX shielded panel.

Angled MAX panels are not recommended for use with RS3 rack series. RS series racks with VPC vertical patching channels are recommended.

Panels include mounting hardware. Rear cable manager not included.

Note: 1U = 44.5mm (1.75 in.)

**12-Port MAX Panel Mounted on S89D Bracket**

The MAX S89D offers an economical solution for smaller applications while allowing for a range of different media using the full line of MAX modules.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MX-89D-12</td>
<td>12-port MAX panel mounted on an 89D bracket</td>
</tr>
</tbody>
</table>

height: 254.0mm (10.0 in.),
width: 85.9mm (3.38 in.),
depth: 47.8mm (1.88 in.)

**MAX Panel Accessories**

<table>
<thead>
<tr>
<th>MX-PNL-LBL4*</th>
<th>10 sheets of laser printable labels for 16-port MAX panels</th>
</tr>
</thead>
<tbody>
<tr>
<td>MX-PNL-LBL6*</td>
<td>10 sheets of laser printable labels for 24- and 48-port MAX panels</td>
</tr>
</tbody>
</table>

*Visit our web site or contact our Technical Support Department for labeling software.*
## CT® Patch Panels

### Oversized CT Panels

Oversized CT panels are available for applications that require additional labeling space. They provide the same flexibility as our standard CT panels and feature a write-on designation surface above each coupler opening that may also be used as a space for adhering your own label. Siemon offers adhesive-backed label holders with replaceable write-on labels that mount above the entire row of CT couplers.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description*</th>
<th>RMS</th>
<th>Maximum Quantity of CT Couplers</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT-PNL-24-ID</td>
<td>24-port panel</td>
<td>3</td>
<td>12</td>
</tr>
</tbody>
</table>

*Number of ports when configured with two-port CT couplers.

Note: 1 RMS = 44.5mm (1.75 in.)

### CT Patch Panels

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description*</th>
<th>RMS</th>
<th>Maximum Quantity of CT Couplers</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT-PNL-16</td>
<td>16-port panel</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>CT-PNL-24</td>
<td>24-port panel</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>CT-PNL-32</td>
<td>32-port panel</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>CT-PNL-48</td>
<td>48-port panel</td>
<td>3</td>
<td>24</td>
</tr>
</tbody>
</table>

*Number of ports when configured with two-port CT couplers.

Note: 1 RMS = 44.5mm (1.75 in.)

---

**Technical Tip!**

Flat couplers are recommended for patch panel applications.
MAX® In-Line Coupler Panel

Siemon’s In-Line Coupler Panel is a 1U patch panel that allows users the ability to patch on the front and rear of the patch panel with standard RJ45 patch cables. When used with Siemon factory tested solid double ended IC and stranded MC cords, active equipment ports can be very quickly duplicated at the patch panel. The compact 1U design features a removable rear cable management bar and is available with Category 5e or 6 UTP couplers.

Management – RJ45 connections at the front and rear of the panel enables faster installation and deployment

Strength – Lightweight high strength steel with black finish

Labeling – Panel labeling area provided allowing unique panel identifiers

Mounting – Panels can be mounted directly on standard 19 inch rack or cabinet. CEA 310-E compliant

Preassembly – Panel pre-assembled with 24 category 5e or 6 UTP couplers

In-Line Couplers - Allow you to plug a RJ45 plug into both sides of a coupler

Cable Management – Integrated cable manager provides ability to secure cables at the rear of the panel for proper strain relief

Latches – Individual coupler latches are recessed within the panel, creating a clean front surface
PRODUCT INFORMATION

<table>
<thead>
<tr>
<th></th>
<th>Mechanical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimensions</strong></td>
<td>109.2mm x 482.6mm x 44.2mm</td>
</tr>
<tr>
<td></td>
<td>(4.30 in. x 19.00 in. x 1.74 in.)</td>
</tr>
<tr>
<td><strong>Mounting</strong></td>
<td>CEA-310-E 19-inch (482.6mm) rack</td>
</tr>
<tr>
<td><strong>Material</strong></td>
<td>Panel: 16 AWG CRS.                           Wire Manager: 14 AWG CRS.</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>-10 °C to +60 °C (+14 °F to +140 °F)</td>
</tr>
<tr>
<td><strong>Relative Humidity</strong></td>
<td>Up to 95%, non-condensing</td>
</tr>
<tr>
<td><strong>Storage Temperature</strong></td>
<td>-40 °C to +70 °C (-40 °F to +158 °F)</td>
</tr>
<tr>
<td><strong>Insertion cycles</strong></td>
<td>750 Mating cycles</td>
</tr>
<tr>
<td><strong>Application requirements</strong></td>
<td>Maximum one In-Line coupler per channel</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Black</td>
</tr>
</tbody>
</table>

ORDERING INFORMATION

MX-K-C5-IL-24.............In-Line Coupler Panel, Cat 5e UTP, 1U, Black
MX-K-C6-IL-24.............In-Line Coupler Panel, Cat 6 UTP, 1U, Black

Panels include tie-wraps, wire manager and mounting screws. Also offered in Category 5e UTP.
BladePatch® 6 UTP Modular Cords

Siemon’s BladePatch 6 offers a unique category 6 solution for high-density patching environments. It features an innovative push-pull boot design to control the latch, enabling easy access and removal of the cord in tight-fitting areas. The BladePatch cord is ideal for patching blade servers, patch panels, or any equipment with high density RJ-45 outlets.

Snagless — Push-pull design eliminates external thumb latch which can snag and break

Push-Pull Boot Activates Latch

Revolutionary Design — Push-pull latch design eliminates need to defeat thumb latch used in standard modular plug designs

High Density — Ideal for high density data center applications and today’s high-density blade servers

Low Profile Boot Design — Optimizes side-stackability of patch cords and allows use in even the most dense equipment

Easy Access and Removal — RJ-45 patch cord with patent-pending push-pull latch design enables easy access and removal in high density patching environments

Universal Compatibility — Fits within any standard RJ-45 opening.

Revolutionary Latch — Simply push the boot forward to latch into the outlet and pull back to release.

High Density — The push-pull design enables easy access and removal via the boot in tight-fitting areas.

BladePatch 6 UTP

Category 6 UTP BladePatch, double-ended, RJ-45 modular patch cord with push-pull latching design, color matching cord/boot, T568A/B.

BP6-JXX-(JXX)

| Cord Color: | 01 = Black |
| 02 = White |
| 03 = Red |
| 04 = Grey |
| 05 = Yellow |
| 06 = Blue |
| 07 = Green |
| 08 = Violet |
| 09 = Orange |

| Cord Length: | 03 = 0.9m (3 ft.) |
| 05 = 1.5m (5 ft.) |
| 07 = 2.1m (7 ft.) |
| 10 = 3.1m (10 ft.) |
| 15 = 4.6m (15 ft.) |
| 20 = 6.1m (20 ft.) |

Add “B” for bulk pack of 100 modular cords.

www.siemon.com
MC® 6 UTP Modular Cords

Siemon’s category 6 series of modular cords are key components to ensure optimum channel performance of our category 6 UTP systems. A variety of product enhancements contribute to the cord’s superior performance — including 250 MHz rated stranded cordage, a patented crosspair isolator and an innovative 360° crimp, which provides excellent plug-to-cable strain relief without causing pair deformation. The cable used to manufacture the category 6 patch cords exceeds the specifications set forth by both ANSI/TIA-568-C.2 and ISO/IEC 11801:2002.

Excellent Bend Relief
Boot and integrated strain relief ensures proper bend relief, critical for category 6 performance

Color Coding
Optional colored clips enable field color coding and can easily be snapped into place without having to disconnect cords

STANDARDS COMPLIANCE
- ANSI/TIA-568-C.2
- ISO/IEC 11801
- IEEE 802.3af (PoE)
- IEEE 802.3at (PoE+)
- IEC 60603-7
- cUL US Listed
- IEC 60332-1, 60754, 61054, 61034
- TIA-968-A (formerly FCC Part 68 Subpart F)

Internal load bar provides consistent terminations and ideal pair geometry

Innovative 360° crimp provides excellent plug-to-cable strain relief without causing pair deformation

Patented metallic isolator inside plug for consistent, exceptional NEXT performance

Clear boots and optional color clips enable a single cord part number to be custom colored coded

Boots feature an ultra slim design for high-density patching

Boots feature an ultra slim design for high-density patching

STANDARDS COMPLIANCE
- ANSI/TIA-568-C.2
- ISO/IEC 11801
- IEEE 802.3af (PoE)
- IEEE 802.3at (PoE+)
- IEC 60603-7
- cUL US Listed
- IEC 60332-1, 60754, 61054, 61034
- TIA-968-A (formerly FCC Part 68 Subpart F)

Modular cords feature high performance category 6 cable for optimal flexibility and transmission performance, exceeding category 6 performance specifications

Jacket meets the flame resistance requirements for both CM and LSOH

MC 6 UTP Modular Cords

Category 6 MC, double-ended, 4-pair UTP stranded modular patch cord, T568A/B, clear boot.

<table>
<thead>
<tr>
<th>Cord Length</th>
<th>Cord Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>03 = 0.9 m (3 ft.)</td>
<td>01 = Black, 04 = Grey, 07 = Green</td>
</tr>
<tr>
<td>05 = 1.5 m (5 ft.)</td>
<td>02 = White, 05 = Yellow, 08 = Violet</td>
</tr>
<tr>
<td>07 = 2.1 m (7 ft.)</td>
<td>03 = Red, 06 = Blue, 09 = Orange</td>
</tr>
<tr>
<td>10 = 3.1 m (10 ft.)</td>
<td></td>
</tr>
<tr>
<td>15 = 4.6 m (15 ft.)</td>
<td></td>
</tr>
<tr>
<td>20 = 6.1 m (20 ft.)</td>
<td></td>
</tr>
</tbody>
</table>

Add “B” for bulk pack of 100 modular cords.

Clip-(XX) . . . . . . . . . . . . . . . . . Color coding clip, bag of 25

<table>
<thead>
<tr>
<th>Clip Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 = Black, 04 = Grey, 07 = Green</td>
</tr>
<tr>
<td>02 = White, 05 = Yellow, 08 = Violet</td>
</tr>
<tr>
<td>03 = Red, 06 = Blue, 09 = Orange</td>
</tr>
</tbody>
</table>

www.siemon.com
IC® 6 Solid Single-Ended Cords

Siemon’s category 6 IC solid single-ended modular cords are designed for use in category 6 applications requiring a consolidation point (CP) or cross-connect (as an equipment cord). The cords are 100% factory transmission tested to 250 MHz and feature the same plug construction used in Siemon’s stranded category 6 modular cords. These cords are available in CMP and CMR versions and are single-ended for direct termination.

### Premium 6 IC Modular Cords

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC6E-8A-(XX)-B(XX)R</td>
<td>Premium 6 IC, single-ended, non-plenum, 4-pair UTP solid modular cord, blue jacket with colored boot, T568B, CMR</td>
</tr>
<tr>
<td>IC6E-8T-(XX)-B(XX)R</td>
<td>Premium 6 IC, single-ended, non-plenum, 4-pair UTP solid modular cord, blue jacket with colored boot, T568A, CMR</td>
</tr>
<tr>
<td>IC6E-8A-(XX)-B(XX)P</td>
<td>Premium 6 IC, single-ended, plenum, 4-pair UTP solid modular cord, blue jacket with colored boot, T568B, CMP</td>
</tr>
<tr>
<td>IC6E-8T-(XX)-B(XX)P</td>
<td>Premium 6 IC, single-ended, plenum, 4-pair UTP solid modular cord, blue jacket with colored boot, T568A, CMP</td>
</tr>
</tbody>
</table>

### System 6 IC Modular Cords

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC6-8A-(XX)-B(XX)R</td>
<td>System 6 IC, single-ended, non-plenum, 4-pair UTP solid modular cord, blue jacket with colored boot, T568B, CMR</td>
</tr>
<tr>
<td>IC6-8T-(XX)-B(XX)R</td>
<td>System 6 IC, single-ended, non-plenum, 4-pair UTP solid modular cord, blue jacket with colored boot, T568A, CMR</td>
</tr>
<tr>
<td>IC6-8A-(XX)-B(XX)P</td>
<td>System 6 IC, single-ended, plenum, 4-pair UTP solid modular cord, blue jacket with colored boot, T568B, CMP</td>
</tr>
<tr>
<td>IC6-8T-(XX)-B(XX)P</td>
<td>System 6 IC, single-ended, plenum, 4-pair UTP solid modular cord, blue jacket with colored boot, T568A, CMP</td>
</tr>
</tbody>
</table>

Use 1st (XX) to specify cord length: 10 = 3.1m (10 ft.), 20 = 6.1m (20 ft.), 30 = 9.1m (30 ft.), 40 = 12.2m (40 ft.), 50 = 15.2m (50 ft.), 60 = 18.3m (60 ft.)

Use 2nd (XX) to specify color of boot: 01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green

Add “D” to denote double-ended.
Category 6 UTP Trunking Cable Assemblies

Siemon’s category 6 UTP copper trunking cable assemblies provide an efficient and cost effective alternative to individual field-terminated components. Combining factory terminated and tested UTP Z-MAX® or MAX® modules with Siemon Premium™ or System 6™ cable, Siemon copper trunking cable assemblies were designed with data center applications in mind. In addition to providing simple and aesthetically pleasing cable management, standard configurations also help maintain consistent cable layout and facilitate efficient moves, adds and changes. The modular design and reduced scrap of trunk assemblies make them the most “Green” method for category 6 cabling.

Identification — Each cable assembly is coded with a unique identification number for administrative purposes.

Breakout Kit — Unique breakout kit creates optimal orientation and limits cable crossing.

Siemon Cable — Utilizes high quality Siemon cable.

Factory Terminated and Tested — Utilizes Z-MAX 6A UTP outlets, factory terminated and tested for high performance.

Proper Orientation — Each leg is cut and labeled for proper module orientation.

MAX Premium 6 Double-Ended Trunking Cable Assemblies

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPRD6E-A1A1(XXX)F. . . . . .</td>
<td>6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMR</td>
</tr>
<tr>
<td>TPPD6E-A1A1(XXX)F. . . . . .</td>
<td>6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMP</td>
</tr>
</tbody>
</table>

MAX System 6 Double-Ended Trunking Cable Assemblies

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCRD6E-A1A1(XXX)F. . . . . .</td>
<td>6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMR</td>
</tr>
<tr>
<td>TCPD6E-A1A1(XXX)F. . . . . .</td>
<td>6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMP</td>
</tr>
</tbody>
</table>

Z-MAX Premium 6 Double-Ended Trunking Cable Assemblies w/Panel Outlets

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPRD6E-P0P0(XXX)F. . . . . .</td>
<td>6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMR</td>
</tr>
<tr>
<td>TPPD6E-P0P0(XXX)F. . . . . .</td>
<td>6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMP</td>
</tr>
</tbody>
</table>

Z-MAX System 6 Double-Ended Trunking Cable Assemblies w/Panel Outlets

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCRD6E-P0P0(XXX)F. . . . . .</td>
<td>6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMR</td>
</tr>
<tr>
<td>TCPD6E-P0P0(XXX)F. . . . . .</td>
<td>6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMP</td>
</tr>
</tbody>
</table>

Use (XXX) to specify length: 009-295 ft. in increments of 3 feet
Standard wiring is T568B. Other lengths and configurations available upon request.
Premium 6™ UTP Cable (North America)

**COMPLIANCE**
- ISO/IEC 11801:2002 (Category 6)
- TIA-568-C.2 (Category 6)
- IEC 61156-5:2002 (Category 6)
- UL CMP and CSA FT6
- UL CMR and CSA FT4

**CABLE CONSTRUCTION**
- UTP
- 0.57mm (0.023 in.) (23 AWG) solid bare copper
- 6 mm (0.24 in.) max jacket diameter
- Central isolation member

**ELECTRICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Resistance &lt;100m</td>
<td>&lt;9.38Ω</td>
</tr>
<tr>
<td>DC Resistance Unbalance</td>
<td>3%</td>
</tr>
<tr>
<td>Mutual Capacitance</td>
<td>5.6 nF/100m</td>
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<tr>
<td>Capacitance Unbalance</td>
<td>&lt;330 pF/100m</td>
</tr>
<tr>
<td>Characteristic Impedance</td>
<td>1-100 MHz: 100 ± 15%</td>
</tr>
<tr>
<td></td>
<td>100-250 MHz: 100 ± 20%</td>
</tr>
<tr>
<td>NVP</td>
<td>CMP-70% CMR-68%</td>
</tr>
<tr>
<td>TCL</td>
<td>30-10 log(f/100) dB</td>
</tr>
<tr>
<td>Delay Screw</td>
<td>≤25ns</td>
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</table>

**PHYSICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>CMP</th>
<th>CMR</th>
</tr>
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<tbody>
<tr>
<td>Pulling Tension (max)</td>
<td>110N (25 lbf)</td>
<td>110N (25 lbf)</td>
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<tr>
<td>Bend Radius (min)</td>
<td>35.6mm (1.4 in.)</td>
<td>35.6mm (1.4 in.)</td>
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<td>Installation Temperature</td>
<td>0 to 60°C (+32 to 140°F)</td>
<td>0 to 75°C (+32 to 140°F)</td>
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<td>Storage Temperature</td>
<td>-20 to 75°C (-4 to 167°F)</td>
<td>-20 to 75°C (-4 to 167°F)</td>
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<td>Operating Temperature</td>
<td>-20 to 60°C (-4 to 140°F)</td>
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**TRANSMISSION PERFORMANCE**

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<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Insertion Loss (dB)</th>
<th>NEXT (dB)</th>
<th>PS NEXT (dB)</th>
<th>ACR (dB)</th>
<th>PSACR (dB)</th>
<th>ACR-F (dB)</th>
<th>PS ACR-F (dB)</th>
<th>Return Loss (dB)</th>
<th>Propagation Delay (ns)</th>
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<td>79.3, 94.2</td>
<td>77.3, 90.2</td>
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<td>70.3, 83.0</td>
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<td>66.5, 79.7</td>
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<td>61.2, 74.0</td>
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<td>53.8, 67.3</td>
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<td>29.7, 47.7</td>
<td>25.7, 35.7</td>
<td>18.7, 32.0</td>
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<td>17.3, 32.2</td>
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<td>18.0, 31.0</td>
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<td>43.3, 56.0</td>
<td>14.4, 32.8</td>
<td>12.4, 26.8</td>
<td>26.8, 37.0</td>
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<td>10.0, 29.5</td>
<td>8.0, 23.5</td>
<td>25.2, 36.0</td>
<td>22.2, 30.0</td>
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<td>536, 505</td>
</tr>
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<td>38.8, 52.0</td>
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<td>-6.4, 11.9</td>
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<td>16.9, 26.0</td>
<td>14.5, 25.0</td>
<td>536, 505</td>
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*Values for frequencies above industry requirements are for information only.

All performance based on 100 meters (328 ft.).
# System 6™ UTP Cable (North America)

## COMPLIANCE
- ISO/IEC 11801:2002 (Category 6)
- TIA-568-C.2 (Category 6)
- IEC 61156-1:2002 (Category 6)
- UL CMP and CSA FT6
- UL CMR and CSA FT4

## CABLE CONSTRUCTION
- UTP
- 0.54 mm (0.021 in.) (23 AWG) solid bare copper
- 5.3 mm (0.208 in.) Nom. jacket diameter - plenum
- 6.0 mm (0.236 in.) Nom. jacket diameter - riser
- Central isolation member

## ELECTRICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>DC Resistance Unbalance</th>
<th>&lt;9.38Ω/100m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutual Capacitance</td>
<td>5.6 nF/100m</td>
</tr>
<tr>
<td>Capacitance Unbalance</td>
<td>&lt;330 pF/100m</td>
</tr>
<tr>
<td>Characteristic Impedance (ohms)</td>
<td>100 MHz: 100 ± 15% 100-550 MHz: 100 ± 22%</td>
</tr>
<tr>
<td>NVP</td>
<td>CMP:70% CMR:68%</td>
</tr>
<tr>
<td>TCL</td>
<td>30-10 log(f/100) dB</td>
</tr>
<tr>
<td>Delay Screw</td>
<td>≤35ns</td>
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## TRANSMISSION PERFORMANCE

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Insertion Loss (dB)</th>
<th>NEXT (dB)</th>
<th>PS NEXT (dB)</th>
<th>ACR (dB)</th>
<th>PS ACR (dB)</th>
<th>ACR-F (dB)</th>
<th>PS ACR-F (dB)</th>
<th>Return Loss (dB)</th>
<th>Propagation Delay (ns)</th>
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<tbody>
<tr>
<td>1.0</td>
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<td>12.3</td>
<td>14.3</td>
<td>20.7</td>
<td>28.7</td>
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## PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Pulling Tension (max)</th>
<th>110N (25 lbf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bend Radius (min)</td>
<td>25mm (1 in.)</td>
</tr>
<tr>
<td>Installation Temperature</td>
<td>≤36 to 60°C (-32 to 140°F)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>≤34 to 75°C (-30 to 167°F)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>≤34 to 60°C (-30 to 140°F)</td>
</tr>
</tbody>
</table>

*Values for frequencies above industry requirements are for information only. All performance based on 100 meters (328 ft.)

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**System 6™ UTP Cable (International)**

### COMPLIANCE
- ISO/IEC 11801 Ed. 2.2 (Class E)
- IEC 61156-5:2002 (Category 6)
- IEEE 802.3
- TIA-568-C.2 (Category 6)
- UL CMR and CSA FT4
- UL CMX
- UL CM
- LSOH: IEC 60332-1, IEC 60754, and IEC 61034

### CABLE CONSTRUCTION
- UTP
- Nominal jacket OD: 6.35mm
- 0.57mm solid (non-tinned) copper
- Central isolation member
- Reverse sequential numbering

### PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>9C6R4-E3</td>
<td>PVC (CMR, CSA FT4) 305m Reel-in-Box</td>
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<tr>
<td>9C6M4-E3</td>
<td>CM, 305m Reel-in-Box</td>
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<td>9C6L4-E3</td>
<td>LSOH (IEC 60332-1), 305m Reel-in-Box</td>
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<td>9C6H4-E3</td>
<td>LSOH (IEC 60332-3C), 305m Reel-in-Box</td>
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</tbody>
</table>

#### DC Resistance
- <9.38Ω/100m

#### DC Resistance Unbalance
- 5%

#### Mutual Capacitance
- 5.6 nF/100m

#### Capacitance Unbalance
- <330 pF/100m

#### Characteristic Impedance (ohms)
- 1-100 MHz: 100 ± 15%
- 100-550 MHz: 100 ± 22%

#### NVP
- 68%

#### TCL
- 30-10 log(1/100) dB

#### Delay Skew
- ≤35ns

### ELECTRICAL SPECIFICATIONS

#### TRANSMISSION PERFORMANCE

<table>
<thead>
<tr>
<th>Frequency p(MHz)</th>
<th>Insertion Loss (dB)</th>
<th>NEXT (dB)</th>
<th>PS NEXT (dB)</th>
<th>ACR (dB)</th>
<th>PS ACR (dB)</th>
<th>ACR-F (dB)</th>
<th>PS ACR-F (dB)</th>
<th>Return Loss (dB)</th>
<th>Propagation Delay (ns)</th>
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<td>42.0</td>
<td>-15.1</td>
<td>-17.1</td>
<td>2.3</td>
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</tbody>
</table>

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All performance based on 100 metres.
**Solution 6™ UTP Cable (North America)**

**COMPLIANCE**
- ISO/IEC 11801:2002 (Category 6)
- TIA/EIA-568-C.2
- UL CMP and CSA FT6
- RoHS Compliant

**CABLE CONSTRUCTION**
- UTP
- 0.57mm (0.023 in.) (23 AWG) solid bare copper
- 5 mm (0.192 in.) max jacket diameter

**DC Resistance**
- <3.38Ω/100m

**DC Resistance Unbalance**
- 5%

**Mutual Capacitance**
- 5.6 nF/100m

**Capacitance Unbalance**
- <330 pF/100m

**Characteristic Impedance (ohms)**
- 1-100 MHz: 100 ± 15%
- 100-520 MHz: 100 ± 22%

**NVP**
- CMP-70%

**LCL**
- 30-10 log(f/100) dB

**Delay Screw**
- ≤45ns

**PHYSICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9C6P4-E2-(XX)-RXA</td>
<td>Plenum (CMP, CSA FT6) 305m (1000 ft.) Reelux</td>
</tr>
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</table>

**ELECTRICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Insertion Loss (dB)</th>
<th>NEXT (dB)</th>
<th>PS NEXT (dB)</th>
<th>ACR-N (dB)</th>
<th>PS ACR-N (dB)</th>
<th>ACR-F (dB)</th>
<th>PS ACR-F (dB)</th>
<th>Return Loss (dB)</th>
<th>Propagation Delay (ns)</th>
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</table>

*Values for frequencies above industry requirements are for information only. All performance based on 100 meters (328 ft.).

**TRANSMISSION PERFORMANCE**

- **GUARANTEED WORST CASE**
- **SIEMON TYPICAL**

**www.siemon.com**
**Solution 6™ UTP Cable (International)**

### COMPLIANCE
- ISO/IEC 11801 Ed. 2.2 (Class E)
- IEC 61156-5:2002 (Category 6)
- IEEE 802.3
- TIA-568-C.2 (Category 6)
- PVC: UL CM, IEC 60332-1
- LSOH: IEC 60332-1, IEC 60754, and IEC 61034

### CABLE CONSTRUCTION
- UTP
- Nominal jacket OD: 5.6mm
- 0.52mm solid (non-tinned) copper, 24 AWG
- Central isolation member
- Reverse sequential numbering

### Other cable lengths also available:
- Add “-5CR” for 500m Reel
- Add “-1KR” for 1000m Reel

### Part #  Description
- 9C6M4-E2 . . . . . . . . . . . . . . . . . . CM, Gray Jacket, 305m Reel-in-Box
- 9C6L4-E2 . . . . . . . . . . . . . . . . . . LSOH, Violet Jacket, 305m Reel-in-Box

### ELECTRICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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<tbody>
<tr>
<td>DC Resistance</td>
<td>≤0.50Ω/100m</td>
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<tr>
<td>DC Resistance Unbalance</td>
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<td>Mutual Capacitance</td>
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<td>Capacitance Unbalance</td>
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<tr>
<td>Characteristic Impedance (ohms)</td>
<td>100 ± 15%, 200-250 MHz: 100 ± 22%</td>
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<tr>
<td>NVP</td>
<td>65%</td>
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<tr>
<td>TCL</td>
<td>30-10 log(100) dB</td>
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<tr>
<td>Delay Skew</td>
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### PHYSICAL PROPERTIES

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<td>CM &amp; LSOH</td>
<td>Pulling Tension (max): 80N</td>
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<td>Bend Radius (min): 25mm</td>
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<td>Installation Temperature</td>
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<tr>
<td>Storage Temperature</td>
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### TRANSMISSION PERFORMANCE

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<th>Insertion Loss (dB)</th>
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<th>ACR (dB)</th>
<th>PS ACR (dB)</th>
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</table>

*All performance based on 100 metres.*
**S210® Connecting Block System**

The Siemon S210 connection system provides superior Category 6 connecting block performance. The S210 block is the ideal for Voice over IP (VoIP) applications. It can be used to support existing cross-connects for standard phone systems today and enables upgrades to a Category 6 rated solution for a seamless network transition.

---

**S210® Connection System**

<table>
<thead>
<tr>
<th>Component</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>S210 Field Termination Kits</td>
<td>3.22</td>
</tr>
<tr>
<td>S210 Field Terminated 19 Inch Panels</td>
<td>3.23</td>
</tr>
<tr>
<td>Vertical S210 Field Terminated Kits</td>
<td>3.23</td>
</tr>
<tr>
<td>S210 Tower Termination Kits and Accessories</td>
<td>3.24</td>
</tr>
<tr>
<td>S210 Connecting Blocks</td>
<td>3.25</td>
</tr>
<tr>
<td>System 6 Cross Connect Wire</td>
<td>3.25</td>
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<tr>
<td>S110/ S210 Covers</td>
<td>3.25</td>
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<tr>
<td>Wall Mount S110/ S210 Cable/ Wire Managers</td>
<td>3.26</td>
</tr>
<tr>
<td>S210 Patch Plugs</td>
<td>3.27</td>
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<td>S210 Cable Assemblies</td>
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<tr>
<td>S210 to MC 6 Cable Assemblies</td>
<td>3.28</td>
</tr>
<tr>
<td>S210 Designation Labels</td>
<td>3.28</td>
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</table>
S210® Connection System

The Siemon S210 offers the best connecting block performance in the telecommunications industry. Its NEXT performance is so exceptional that it is essentially transparent when used as a consolidation point in a category 6 channel.

Colored Labels — Designation strip with interchangeable colored labels can be mounted between each row of connecting blocks.

Internal Crosstalk Barriers
Provide superior NEXT performance (13 dB NEXT margin over category 6 specifications) via 360° pair isolation.

Pyramid™ Wire Entry System
Separates paired conductors when lacing cables to simplify and reduce installation time.

Patented Cable Access Openings
Allow cables to be routed through the rear of the block directly to the point of termination.

S210 Field Termination Kits

Complete S210 installation kits include S210 wiring blocks with detachable legs*, S210 connecting blocks, and label holders with white designation labels.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>S210AB2-64FT</td>
<td>64-pair, S210 field termination kit</td>
</tr>
<tr>
<td></td>
<td>height: 91.4mm (3.60 in.), width: 272mm (10.71 in.), depth: 82.8mm (3.26 in.)</td>
</tr>
<tr>
<td>S210AB2-128FT</td>
<td>128-pair, S210 field termination kit</td>
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<td></td>
<td>height: 182.9mm (7.20 in.), width: 272mm (10.71 in.), depth: 82.8mm (3.26 in.)</td>
</tr>
<tr>
<td>S210AB2-192FT</td>
<td>192-pair, S210 field termination kit</td>
</tr>
<tr>
<td></td>
<td>height: 275mm (10.81 in.), width: 272mm (10.71 in.), depth: 82.8mm (3.26 in.)</td>
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</table>

*Legs detachable on 64-pair version only.
S210® Field Terminated 19 Inch Panels

S210 panels allow wiring blocks to be mounted directly to a 19 inch rack or cabinet. Each panel includes the appropriate quantity of S210 connecting blocks, mounting hardware and label holders with white designation labels. Patented openings between rows allow horizontal cables to be routed from behind the panel and enter the block from the rear, helping to maintain cable jacket and twist up to the point of termination.

<table>
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<tr>
<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>S210DB2-64RFT</td>
<td>64-pair, 19 inch S210 field termination kit, 1U</td>
</tr>
<tr>
<td>S210DB2-128RFT</td>
<td>128-pair, 19 inch S210 field termination kit, 2U</td>
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<tr>
<td>S210DB2-192RFT</td>
<td>192-pair, 19 inch S210 field termination kit, 3U</td>
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</table>

Note: 1U = 44.5mm (1.75 in.)

Vertically Mounted S210 Field Termination Kits

These 32-pair or 48-pair S210 blocks can be mounted on the same S89B or S89D brackets that hold our S66® blocks. The high density 48-pair kit provides category 6 performance in the same footprint as a standard M1-50 66 block. Field-termination kits include the S210 connecting blocks, designation labels and label holders.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>S210DB1-48FT-89</td>
<td>48-pair S210 field termination kit on an 89-type retainer*</td>
</tr>
<tr>
<td>S210DB1-32FT-89</td>
<td>32-pair S210 field termination kit on an 89-type retainer*</td>
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*S89 Brackets are not included and must be ordered separately.
**S210® Tower Field Termination Kits**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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</table>
| S210MB2-192FT | 192-pair, S210 Tower field termination kit  
height: 406mm (16 in.), width: 216mm (8.50 in.), depth: 152mm (6 in.) |
| S210MB2-256FT | 256-pair, S210 Tower field termination kit  
height: 541mm (21.31 in.), width: 216mm (8.50 in.), depth: 152mm (6 in.) |
| S210MB2-320FT | 320-pair, S210 Tower field termination kit  
height: 676mm (26.62 in.), width: 216mm (8.50 in.), depth: 152mm (6 in.) |

Each kit includes adequate connecting blocks to fully populate tower.

**Large-Scale Vertical Cable Managers**

The S188 large scale vertical cable manager for the S110®/S210 Towers accommodates our quarter-turn RS-CH cable managers. With the RS-CH managers installed, additional vertical channels can be integrated into the main channel to segregate patch cables and cross-connect wire.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>
| S188-300      | Large-scale vertical cable manager for use with 192-pair S210 Tower  
height: 406mm (16 in.), width: 216mm (8.50 in.), depth: 152mm (6 in.) |
| S188-400      | Large-scale vertical cable manager for use with 256-pair S210 Tower  
height: 541mm (21.31 in.), width: 216mm (8.50 in.), depth: 152mm (6 in.) |
| S188-500      | Large-scale vertical cable manager for use with 320-pair S210 Tower  
height: 676mm (26.62 in.), width: 216mm (8.50 in.), depth: 152mm (6 in.) |

**Small-Scale Vertical Cable Managers**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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</table>
| S110M-WM-300  | Small-scale vertical cable manager, for use with 192-pair S210 Tower  
height: 406mm (16 in.), width: 76.2mm (3.0 in.), depth: 152mm (6 in.) |
| S110M-WM-400  | Small-scale vertical cable manager, for use with 256-pair S210 Tower  
height: 541mm (21.31 in.), width: 76.2mm (3.0 in.), depth: 152mm (6 in.) |
| S110M-WM-500  | Small-scale vertical cable manager, for use with 320-pair S210 Tower  
height: 676mm (26.62 in.), width: 76.2mm (3.0 in.), depth: 152mm (6 in.) |

**S210 Tower Optional Accessories**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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</table>
| S188-WD       | Metal duct for additional horizontal cable management at base of S210 Tower  
height: 114.3mm (4.50 in.), width: 215.9mm (8.50 in.), depth: 203.2mm (8 in.) |
| S188-GND      | Ground kit consists of one, 3-position grounding busbar  
height: 9.0mm (0.35 in.), width: 50.8mm (2.0 in.), depth: 12.3mm (0.49 in.) |
**S210® Connecting Block**

Siemon S210 blocks terminate 22 – 26 AWG (0.64mm – 0.40mm) solid or 7-strand wires. They also incorporate markings to designate tip and ring conductors, color-coded pairs on each block and Siemon’s patent-pending Pyramid™ wire entry system to expedite lacing of pairs.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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<tr>
<td>S210C-4</td>
<td>4-pair, S210 connecting block</td>
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**System 6™ Cross-Connect Wire**

Siemon’s System 6 cross-connect is ideal for cross-connect applications up to 5 meters (15 ft.). It can be used for System 6 installations using S210 wiring blocks.

<table>
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<th>Description</th>
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<tbody>
<tr>
<td>CJ6-W4-1000</td>
<td>Category 6, 4-pair, 24 AWG (0.05mm), solid cross-connect wire, pair colors blue/orange/green/brown, 305mm (1000 ft.) spool</td>
</tr>
</tbody>
</table>

**COMPLIANCE**

- TIA-568-C.2 (Category 6)
- IEC 61156-5:2002 (Category 6)

**CABLE CONSTRUCTION**

- 0.5mm (0.02 in.) 24 AWG bare copper conductors
- 1.02mm (0.04 in.) insulation diameter nominal

**S110®/S210 Covers**

The Siemon Company S110/S210 covers are available in 50- and 100-pair sizes (32- and 64-pair for S210). The cover easily snaps on and off wiring blocks and S110/S210 cable managers, and enhances the appearance of the S110/S210 installation. Removable icon tabs provide color-coding on the front for compliance with the ANSI/TIA/EIA-606-A administration standard.

<table>
<thead>
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<th>Part #</th>
<th>Description</th>
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<tr>
<td>S110-CVR-50-(XX)</td>
<td>50-pair S110 cover/32-pair S210 cover</td>
</tr>
<tr>
<td>S110-CVR-100-(XX)</td>
<td>100-pair S110 cover/64-pair S210 cover</td>
</tr>
</tbody>
</table>

Use (XX) to specify color: 00 = clear, 01 = black, 20 = ivory

Clear covers protect connections yet allow full viewing of circuits and individual station ID's.
Wall Mount S110®/S210®
Cable Managers

The Siemon S110/S210 cable managers are the foundation of a series of cable management products that are
designed to support S110 or S210 cross-connects and patch panel applications. They can be ordered
individually for field assembly in wall-mount applications. The cable managers are manufactured with high-
strength, flame-retardant thermoplastic, and have been designed for easy cable insertion or withdrawal. The 2
RMS cable manager provides additional capacity for high-density patching applications. Siemon S110/S210
covers can be snapped on to provide color-coding and keep cables hidden.

Cable Managers Without Legs

<table>
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<tr>
<th>Part #</th>
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<td>S110B1RMS</td>
<td>1 RMS white cable manager without legs</td>
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<td>S110B1RMS-01</td>
<td>1 RMS black cable manager without legs</td>
</tr>
<tr>
<td>S110B2RMS</td>
<td>2 RMS white cable manager without legs</td>
</tr>
<tr>
<td>S110B2RMS-01</td>
<td>2 RMS black cable manager without legs</td>
</tr>
</tbody>
</table>

Cable Managers With Legs

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S110A1RMS</td>
<td>1 RMS white cable manager with legs</td>
</tr>
<tr>
<td>S110A1RMS-01</td>
<td>1 RMS black cable manager with legs</td>
</tr>
<tr>
<td>S110A2RMS</td>
<td>2 RMS white cable manager with legs</td>
</tr>
<tr>
<td>S110A2RMS-01</td>
<td>2 RMS black cable manager with legs</td>
</tr>
</tbody>
</table>

Note: 1 RMS = 44.5mm (1.75 in.)

S100A2 Wire Manager

The S100A2 wire manager snaps onto the legs of the S110 or S210 blocks/legs to provide a channel for
routing cross-connect wire or patch cords. One S100A2 is designed to be used with each 100-/64-pair
leg (2 for 200-/128-pair, 3 for 300-/192-pair) to allow space to access the wires. The S100A2 can also be
mounted side-by-side. The outside edges are flared and tapered for smoother wire entry and exit and
preventing damage to the conductor insulation.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S100A2</td>
<td>Snap-on S110/S210 wire manager, white</td>
</tr>
<tr>
<td>S100A2-01</td>
<td>Snap-on S110/S210 wire manager, black</td>
</tr>
</tbody>
</table>
**S210® Patch Plugs**

The S210 patch plug utilizes internal pair isolation, pair-to-pair compensation and layered contacts to improve cross-talk performance so that the mated plug and connecting block far exceed category 6 connecting hardware transmission requirements. The clear housing keeps the conductor colors/positions visible to aid matching termination positions on the other end.

**Proper Orientation** — Directional arrow provided to assist in proper insertion orientation

**Tapered Lacing** — Enable easy lacing of pairs for quick field termination

**Ergonomic Handle** — Aids insertion and removal of patch plug

**Clear Housing** — Durable, flame-retardant, clear thermoplastic housing keeps conductors visible during and after termination

**Polarization** — Each plug housing includes polarization features to ensure proper orientation of the plug when connecting to the S210 block

---

**Field Installable**

Terminates 24-26 AWG (0.40mm-0.51mm) solid or 7-strand twisted-pair cable.

---

**NEXT Performance**

The S210 4-pair plug provides unparalleled performance, with 6.7 dB NEXT (typical) and 2.2 dB NEXT (worst case) at 250 MHz.

---

**Technical Tip!**

S210 to MC® 6 cable assemblies can be configured in the field. Siemon MC 6 modular cords can be purchased and cut in half. The cut end of the cord can then be field-terminated to the S210P patch plug while the factory-terminated and tested modular plug end remains undisturbed.

---

**S210 Cable Assemblies**

The S210 cable assemblies utilize Siemon’s S210P4 patch plugs for easy and reliable connections between S210 termination fields. These assemblies use high performance stranded cable which exceeds category 6 specifications and are 100% factory transmission tested to ensure optimum category 6 channel performance. Colored icons are available for color-coding S210 plugs.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S210P4-P4-(XX)</td>
<td>4-pair, double-ended, S210 stranded cable assembly, white jacket</td>
</tr>
<tr>
<td>S210P2-P2-(XX)</td>
<td>2-pair, double-ended, S210 stranded cable assembly, white jacket</td>
</tr>
<tr>
<td>S210P1-P1-(XX)</td>
<td>1-pair, double-ended, S210 stranded cable assembly, white jacket</td>
</tr>
</tbody>
</table>

Use (XX) to specify cord length: 03 = 0.9m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.1m (7 ft.), 10 = 3.1m (10 ft.), 15 = 4.6m (15 ft.), 20 = 6.1m (20 ft.)

Custom lengths available upon request. Contact our Customer Service Department for more information.

www.siemon.com
S210® to MC® 6 Cable Assemblies

The S210 to modular cable assemblies combine Siemon’s high performing plugs for patching network equipment to S210 connecting blocks or providing test access to S210 termination fields. The combination of plugs, high performance cable and 100% factory transmission testing ensures performance is compatible with category 6 channel specifications.

Part # Description
S210P4A-(XX)-(XX) . . . . . . . . . 4-pair, S210P4 to MC 6 stranded cable assembly, color matching jacket/boot, T568B, CMG
S210P4T-(XX)-(XX) . . . . . . . . . 4-pair, S210P4 to MC 6 stranded cable assembly, color matching jacket/boot, T568A, CMG
S210P2E2-(XX)-(XX) . . . . . . . 2-pair, S210P2 to MC 6 stranded cable assembly, white jacket with colored boot, 10/100BASE-T, CMG

Use 1st (XX) to specify cord length:
03 = 0.9m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.1m (7 ft.), 10 = 3.1m (10 ft.), 15 = 4.6m (15 ft.), 20 = 6.1m (20 ft.)
Use 2nd (XX) to specify color:
01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green

S210 Designation Labels

Siemon S210 wiring blocks allow for designation labels to be mounted between each row of connecting blocks. S210 designation labels feature S210 listings on the side to clearly identify the termination type, 4-pair markings and can also be used for color-coding.

Part # Description
S110-HLDR . . . . . . . . . . . . . . . . Transparent plastic label holders, bag of 6
S210-LBL-2 . . . . . . . . . . . . . . . . 4-pair S210 marked white labels, bag of 6

S110®/S210 Designation Label Sheets

Siemon’s S110/S210 designation label sheets provide the ability to custom print labels used on S110 or S210 blocks. The sheets can be used to print 2-, 3-, 4-, or 5-pair labels and eliminate the need to order separate sheets for different configurations. There are 20 labels per side and both sides are marked so they can be reversed and re-printed in case of an error.

Part # Description
S110-SHT-(XX) . . . . . . . . . . . . . . . S110/S210 Designation label sheets, package of 6

Use (X) to specify color: 2 = white, 3 = red, 4 = gray, 5 = yellow, 6 = blue, 7 = green, 8 = violet, 9 = orange, 60 = brown

*Visit our web site or contact our Technical Support Department for labeling software.
Category 5e Shielded

In addition to the excellent EMI resistance and signal security provided by its shielded construction, Siemon’s end-to-end category 5e shielded system is guaranteed to deliver transmission performance margins in excess industry standards for category 5e. And thanks to the ultra-fast terminating Z-MAX® category 5e shielded outlets and Quick-Ground™ patch panels, deploying a high-performance, noise-resistant shielded system is every bit as fast and easy as UTP.

Section Contents

Z-MAX® 5e Shielded Outlets ........................................ 4.1
Z-MAX 5e Shielded Patch Panels ................................. 4.2
TERA®-MAX® Shielded Patch Panels ......................... 4.2
BladePatch® 5e Shielded Modular Cords ..................... 4.3
MC® 5 Shielded Modular Cords ............................... 4.4
Solution 5e™ F/UTP Cable (North America) ................. 4.5
Premium 5e™ F/UTP Cable (International) ................. 4.6
Z-MAX® 5e Shielded Outlets

Combining exceptional category 5e performance with best-in-class termination time, the Z-MAX 5e shielded outlet is a vital part of an end-to-end Z-MAX 5e shielded cabling system. The Z-MAX module exceeds all applicable industry standards, including ANSI/TIA-568-C.2 and Amendments 1 and 2 of ISO/IEC 11801 2nd ed.

Terminates in as little as 45 seconds using the Z-TOOL™

Robust die cast housing optimizes shielding from EMI and alien crosstalk

Zero-cross termination module accelerates lacing and eliminates pair crossing

User Friendly
The ergonomic and easy-to-use Z-TOOL ensures a fast, low force termination.

Flexibility and Simplified Ordering
Hybrid design allows the same outlet to be mounted in flat or angled orientations.

Ordering Information:

<table>
<thead>
<tr>
<th>Mounting Style</th>
<th>Bezel Colour</th>
<th>Door Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Blank) = Hybrid Flat/Angled</td>
<td>01 = Black</td>
<td>(Blank) = No Door</td>
</tr>
<tr>
<td>K = Keystone</td>
<td>02 = White</td>
<td>D = Spring Door (Hybrid only)</td>
</tr>
<tr>
<td></td>
<td>03 = Red</td>
<td></td>
</tr>
<tr>
<td></td>
<td>04 = Grey</td>
<td></td>
</tr>
<tr>
<td></td>
<td>05 = Yellow</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20 = Ivory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>80 = Light Ivory</td>
<td></td>
</tr>
</tbody>
</table>

Outlet terminates S/FTP, F/FTP and F/UTP cable constructions with 22 – 26 AWG (0.64 – 0.51mm) solid and 26 AWG (0.48mm) stranded conductors, with up to 0.60mm diameter conductors and up to 1.48mm diameter over insulation.

* Add “B” to end of part number for bulk project pack of 100 modules. (hybrid modules include icons).
Z-MAX® 5e Shielded Patch Panels

Z-MAX 5e shielded patch panels provide unprecedented performance and reliability in a high-density modular solution. These complete patch panel kits combine 19 inch shielded patch panels with Z-MAX 5e shielded panel outlets to offer the industry’s highest performing Category 5e patching solution.

These panels also accelerate installation through quick-snap module insertion and automatic grounding of modules via an embedded grounding conductor. The panel allows one- or two-hole ground lug connections to rack on cabinet grounding system. This complete shielded solution provides maximum protection from outside interference and superior 5e performance.

**Ordering Information:**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZSS-PNL(X)-24K</td>
<td>Z-MAX 24-Port, Category 5e shielded patch panel kit, 1U, black</td>
</tr>
<tr>
<td>ZSS-PNL(X)-U48K</td>
<td>Z-MAX 48-Port, Category 5e shielded patch panel kit, 1U, black</td>
</tr>
<tr>
<td>ZS-PNL(X)-24E</td>
<td>Z-MAX shielded patch panel empty, 1U, black</td>
</tr>
<tr>
<td>ZS-PNL(X)-U48E</td>
<td>Z-MAX shielded patch panel empty, 1U, black</td>
</tr>
</tbody>
</table>

Use (X) to specify mounting style: (Blank) = Flat, A = Angled

**Removable Wire Manager**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZS-P(X)-24</td>
<td>Z-MAX 24-Port, Category 5e shielded patch panel with removable wire manager kit, 1 RMS, black, with outlets</td>
</tr>
<tr>
<td>ZS-P(X)-48</td>
<td>Z-MAX 48-Port, Category 5e shielded patch panel with removable wire manager kit, 1 RMS, black, with outlets</td>
</tr>
<tr>
<td>ZS-P(X)-24</td>
<td>Z-MAX 24-Port shielded patch panel with removable wire manager, 1 RMS, black, empty</td>
</tr>
<tr>
<td>ZS-P(X)-48</td>
<td>Z-MAX 48-Port shielded patch panel with removable wire manager, 1 RMS, black, empty</td>
</tr>
</tbody>
</table>

Use (X) to specify mounting style: (F) = Flat, A = Angled

**Panel Accessories:**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z-PNL-PL24</td>
<td>Patch panel label sheet, numbered 1 to 24, bag of 100</td>
</tr>
<tr>
<td>Z-PNL-PL48</td>
<td>Patch panel label sheet, numbered 25 to 48, bag of 100</td>
</tr>
<tr>
<td>Z-PNL-P</td>
<td>Patch panel label holder (6-port each), bag of 25</td>
</tr>
<tr>
<td>Z5-SP</td>
<td>Z-MAX 5e shielded panel outlet</td>
</tr>
<tr>
<td>Z-BL-01</td>
<td>Z-MAX 5e shielded panel blank, bag of 10, black</td>
</tr>
</tbody>
</table>

**TERA®-MAX® Patch Panels**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TM-PNLZ-24-01</td>
<td>24-port TERA-MAX panel, black, 1U</td>
</tr>
<tr>
<td>TM-PNLZ-24</td>
<td>24-port TERA-MAX panel, metallic, 1U</td>
</tr>
<tr>
<td>TM-PNLZA-24-01</td>
<td>24-port Angled TERA-MAX panel, black, 1U</td>
</tr>
<tr>
<td>TM-PNLZA-24</td>
<td>24-port Angled TERA-MAX panel, metallic, 1U</td>
</tr>
</tbody>
</table>

Panels include designation labels, cable ties, grounding lug and mounting hardware. Note: 1U = 44.5mm (1.75 in.)

Note: TERA-MAX panels are designed for use with hybrid (flat/angled) shielded Z-MAX outlets. Also compatible with TERA outlets.

Note: Z-MAX shielded patch panels designed for use with Z-MAX shielded panel outlets only

Panels include Z-TOOL®, label/icon holders, designation labels, cable ties, grounding lugs, and mounting hardware. Note: 1U = 44.5mm (1.75 in.)

* included in kit only
BladePatch® 5e Shielded Modular Cords

Siemon’s category 5e BladePatch patch cords offer a unique solution for high-density patching environments. They feature an innovative push-pull boot design to control the latch, enabling easy access and removal of the cord in tight-fitting areas. The BladePatch cords are ideal for patching blade servers, patch panels, or any equipment with high density RJ-45 outlets.

Ordering Information:

Category 5e shielded BladePatch, double-ended modular patch cord with push-pull latching design, color matching cord/boot, T568A/B, LSOH

BPSS-(XX)M-(XX)

<table>
<thead>
<tr>
<th>Cord Length</th>
<th>Cord Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>03 = 0.9m (3 ft.)</td>
<td>04 = Gray, 07 = Green</td>
</tr>
<tr>
<td>05 = 1.5m (5 ft.)</td>
<td>02 = White, 05 = Yellow</td>
</tr>
<tr>
<td>07 = 2.1m (7 ft.)</td>
<td>03 = Red, 06 = Blue</td>
</tr>
<tr>
<td>10 = 3.1m (10 ft.)</td>
<td>01 = Black, 08 = Violet</td>
</tr>
<tr>
<td>15 = 4.6m (15 ft.)</td>
<td>06 = Blue, 07 = Orange</td>
</tr>
<tr>
<td>20 = 6.1m (20 ft.)</td>
<td></td>
</tr>
</tbody>
</table>

Add “B” for bulk project pack of 100 modular cords.
MC® 5e Shielded Modular Cords

Siemon’s shielded MC 5e modular cords are manufactured using stranded shielded cable that meets all category 5e specifications. Modular plugs have an overall shield and meet TIA-968-A and IEC 60603-7 specifications. T568A/B wired assemblies include colored strain-relief boots and are available in a wide range of lengths.

Universal Wiring — Compatible with T568A/B wiring schemes

Latch Guard — Boots feature a latch guard to protect plug from snagging when pulling through pathways or cable managers

Color Options — Variety of color options available for circuit identification

Superior Quality — Quality plug components ensure long-term resistance to corrosion from humidity, extreme temperatures, and airborne contaminants

Ordering Information:

Category 5e shielded double-ended 4-pair stranded modular cord, color matching jacket/boot, T568A/B, LSZH

**MC®5S-(XX)M-(XX)L**

<table>
<thead>
<tr>
<th>Cord Length:</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 = 1m (3.3 ft.)</td>
</tr>
<tr>
<td>1.5 = 1.5m (4.9 ft.)</td>
</tr>
<tr>
<td>02 = 2m (6.6 ft.)</td>
</tr>
<tr>
<td>03 = 3m (9.8 ft.)</td>
</tr>
<tr>
<td>04 = 4m (13.1 ft.)</td>
</tr>
<tr>
<td>05 = 5m (16.4 ft.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cord Color:</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 = Black</td>
</tr>
<tr>
<td>02 = White</td>
</tr>
<tr>
<td>03 = Red</td>
</tr>
<tr>
<td>04 = Gray</td>
</tr>
<tr>
<td>05 = Yellow</td>
</tr>
<tr>
<td>06 = Blue</td>
</tr>
<tr>
<td>07 = Green</td>
</tr>
</tbody>
</table>

Add “B” to end of part number for bulk project pack of 100 cords.
Solution 5e™ F/UTP Cable (North America)

COMPLIANCE
- ISO/IEC 11801:2002 (Category 5e)
- TIA-568-C.2 (Category 5e)
- IEC 61156-5:2002 (Category 5e)
- UL CMR and CSA FT4

CABLE CONSTRUCTION
- F/UTP
- 0.5mm (0.02 in.) (24 AWG) solid bare copper
- 7.4mm (0.29 in.) max jacket diameter
- Shield is an aluminum foil enclosing a 0.5mm (0.02 in.) (24 AWG) tinned copper drain wire

ELECTRICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>Plenum (CMP, CSA FT4)</th>
<th>305m (1000 ft.), Reel</th>
</tr>
</thead>
<tbody>
<tr>
<td>9A5P4-E1-(XX)-R1A</td>
<td>Use (XX) to specify jacket color: 01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green, 08 = violet, 09 = orange</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>CMR</th>
<th>Pulling Tension (max)</th>
<th>110N (25 lbf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bend Radius (min)</td>
<td>25mm (1.0 in.)</td>
<td></td>
</tr>
<tr>
<td>Installation Temperature</td>
<td>0 to 60°C (+32 to 140°F)</td>
<td></td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-20 to 60°C (-4 to 140°F)</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20 to 60°C (-4 to 140°F)</td>
<td></td>
</tr>
</tbody>
</table>

TRANSMISSION PERFORMANCE

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Insertion Loss (dB)</th>
<th>NEXT (dB)</th>
<th>PS NEXT (dB)</th>
<th>ACR (dB)</th>
<th>PSACR (dB)</th>
<th>ACR-F (dB)</th>
<th>PS ACR-F (dB)</th>
<th>Return Loss (dB)</th>
<th>Propagation Delay (ns)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>2.1</td>
<td>65.3</td>
<td>68.3</td>
<td>62.3</td>
<td>66.6</td>
<td>60.2</td>
<td>64.2</td>
<td>63.8</td>
<td>67.8</td>
</tr>
<tr>
<td>4.0</td>
<td>4.1</td>
<td>59.3</td>
<td>63.6</td>
<td>57.3</td>
<td>65.2</td>
<td>53.2</td>
<td>51.8</td>
<td>55.7</td>
<td>56.8</td>
</tr>
<tr>
<td>10.0</td>
<td>6.5</td>
<td>53.3</td>
<td>67.3</td>
<td>51.3</td>
<td>63.8</td>
<td>48.8</td>
<td>45.7</td>
<td>51.8</td>
<td>57.2</td>
</tr>
<tr>
<td>16.0</td>
<td>8.3</td>
<td>50.3</td>
<td>64.8</td>
<td>48.8</td>
<td>53.0</td>
<td>43.8</td>
<td>40.8</td>
<td>48.8</td>
<td>45.8</td>
</tr>
<tr>
<td>30.0</td>
<td>9.3</td>
<td>48.8</td>
<td>58.6</td>
<td>53.5</td>
<td>48.5</td>
<td>43.8</td>
<td>40.8</td>
<td>51.5</td>
<td>45.5</td>
</tr>
</tbody>
</table>

*Values above industry requirements are for information only. All performance based on 100 meters (328 ft.).
**Premium 5e® F/UTP Cable (International)**

### COMPLIANCE
- ISO/IEC 11801 Ed. 2.2 (Class D)
- IEC 61156-5 Ed 2.0 (Category 5e)
- IEEE 802.3
- TIA-568-C.2
- EN 50288
- EN 50173
- UL CM
- UL CMR and CSA FT4
- LSZH: IEC 60332-1, IEC 60754, and IEC 61034

### CABLE CONSTRUCTION
- F/UTP
- Nominal jacket OD: 6.1mm
- 0.5mm solid non-tinned copper
- 1.0mm max conductor insulation diameter
- Shield is an aluminum foil tape enclosing a 7 strand 0.6mm tinned copper drain wire
- Reverse sequential numbering

### ELECTRICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>DC Resistance</th>
<th>&lt;9.38Ω/100m</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC resistance Unbalance</td>
<td>5%</td>
</tr>
<tr>
<td>Mutual Capacitance</td>
<td>5.6 nF/100m</td>
</tr>
<tr>
<td>Capacitance Unbalance</td>
<td>&lt;300 pF/100m</td>
</tr>
<tr>
<td>Characteristic Impedance (ohms²)</td>
<td>1-100 MHz: 100 ± 15%</td>
</tr>
<tr>
<td></td>
<td>100 - 250 MHz: 100 ± 22%</td>
</tr>
<tr>
<td>NVP</td>
<td>65%</td>
</tr>
<tr>
<td>LCL</td>
<td>40-10 log/ft dB</td>
</tr>
<tr>
<td>Delay Skew</td>
<td>≤40ns</td>
</tr>
</tbody>
</table>

### PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th></th>
<th>LSZH</th>
<th>CMR/CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulling Tension (max)</td>
<td>110N</td>
<td>110N</td>
</tr>
<tr>
<td>Bend Radius (min)</td>
<td>25mm</td>
<td>25mm</td>
</tr>
<tr>
<td>Installation Temperature</td>
<td>0 to 60°C</td>
<td>-36 to 60°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-20 to 75°C</td>
<td>-34 to 75°C</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20 to 60°C</td>
<td>-34 to 60°C</td>
</tr>
</tbody>
</table>

### TRANSMISSION PERFORMANCE

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Insertion Loss (dB)</th>
<th>NEXT (dB)</th>
<th>PS NEXT (dB)</th>
<th>ACR (dB)</th>
<th>PSACR (dB)</th>
<th>ACR-F (dB)</th>
<th>PS ACR-F (dB)</th>
<th>Return Loss (dB)</th>
<th>Propagation Delay (ns)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>2.1</td>
<td>1.9</td>
<td>65.3</td>
<td>79.3</td>
<td>62.3</td>
<td>77.4</td>
<td>60.2</td>
<td>70.4</td>
<td>63.8</td>
</tr>
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</table>

*Values above 100 MHz are for information only.

All performance based on 100 metres.
Premium 5e® UTP and Solution 5e™ UTP

Siemon's end-to-end Premium 5e UTP cabling solution is guaranteed to provide transmission performance margins in excess of industry standards for category 5e/class D parameters, and has been independently verified to perform to 160 MHz.

All components are approved for use in a Premium 5e channel unless otherwise indicated. Only Premium 5e components are eligible for use in a Premium 5e channel.

Siemon's Solution 5e UTP solution is designed for 100 MHz category 5e/class D installations in which additional performance margins provided by the Premium 5e solution are not required.

Components specifically designed for use in a Solution 5e channels are indicated by product title. Both Solution 5e and Premium 5e components are eligible for use in a Solution 5e channel.

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<td>CT Patch Panels</td>
<td>5.4</td>
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<td>MAX UTP Patch Panels</td>
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<tr>
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<td>MC® 5e UTP Modular Cords</td>
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<tr>
<td>IC 5e UTP Solid Modular Cords</td>
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<td>Solution 5e UTP Cable (North America)</td>
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<td>Category 5e UTP Cross-Connect Wire</td>
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MAX® 5e UTP Outlets

MAX 5e modules exceed category 5e performance with component and channel performance to 160 MHz. These modules offer all the functional advantages of our MAX 6 outlet in a variety of color options. All outlets utilize our S310 punch-down block — making termination quick and easy.

Quick Installation
Pyramid wire entry system on S310® blocks separates paired conductors when lacing cables to simplify and reduce installation time.

Termination
Siemon’s Palm Guard with MAX insert assists in securing outlet during termination.

Superior Performance
Use MC® or BladePatch® 5e modular cords to perfectly match performance of 5e MAX modules.

Use (XX) to specify color: 01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green, 09 = orange, 20 = ivory, 25 = bright white, 80 = light ivory

Angled modules include one color-matching, one red, and one blue icon. Door color is clear for red, yellow, blue and orange angled outlets.

Flat modules include one color-matching, one red, and one blue icon.

Add “B” to end of part number for bulk project pack of 100 outlets (angled and flat outlets include icons).

Note: Keystone version is designed for integration with various international mounting products and is not compatible with MAX mounting hardware.
CT® 5e UTP Couplers

Angled Couplers

CT-C5-C5-(XX) ............... 
Angled, double coupler, universal T568A/B

CT-C5-(XX) ............... 
Angled, single coupler, universal T568A/B

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory
Add “-D” for spring door option.

Technical Tip:
Angled couplers are recommended for work area applications and flat couplers are recommended for patch panel applications.

Flat Couplers

CT-F-C5-C5-(XX) ............... 
Flat, double coupler, universal T568A/B

CT-F-C5-(XX) ............... 
Flat, single coupler, universal T568A/B

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory

Add “B” to end of part number for bulk project pack of 100 couplers.
(Bulk option includes couplers and icons only — termination caps and cable ties are available separately.)
Couplers include one color-matching icon (clear for black), 2 termination caps, and one cable tie per port, plus one red and one blue icon.
**HD® 5e UTP Patch Panels**

Siemon’s HD 5e series patch panels offer the most robust category 5e patching solution in the industry. HD 5e panels feature universal T568A/B wiring and exceed category 5e requirements with component and channel performance to 160 MHz. Compliant pin technology enables the use of multi-pair S110® punch-down tools to reduce termination time.

---

### Ordering Information:

#### HD 5e Flat Patch Panels

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD5-16</td>
<td>16-port category 5e UTP HD patch panel, T568A/B, 1U</td>
</tr>
<tr>
<td>HD5-24</td>
<td>24-port category 5e UTP HD patch panel, T568A/B, 1U</td>
</tr>
<tr>
<td>HD5-32</td>
<td>32-port category 5e UTP HD patch panel, T568A/B, 2U</td>
</tr>
<tr>
<td>HD5-48</td>
<td>48-port category 5e UTP HD patch panel, T568A/B, 2U</td>
</tr>
<tr>
<td>HD5-96</td>
<td>96-port category 5e UTP HD patch panel, T568A/B, 4U</td>
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</tbody>
</table>

Panels include rear cable manager, icon/label holders, designation labels, cable ties, and mounting hardware.

Add “B” for bulk project pack of 5 panels (rear cable managers [p/n: HD-RWM] not included but can be ordered separately).  
Note: 1U = 44.5mm (1.75 in.) 
S110 termination blocks on 16- and 32-port HD 5e panels are not compatible with S110 patch plugs.

#### HD® 5e Angled Patch Panels

<table>
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<th>Description</th>
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<tbody>
<tr>
<td>HD5-24A</td>
<td>24-port angled panel, T568A/B wiring, 1 RMS</td>
</tr>
<tr>
<td>HD5-48A</td>
<td>48-port angled panel, T568A/B wiring, 2 RMS</td>
</tr>
<tr>
<td>PNLH-CVR-01</td>
<td>Angled panel cover, black</td>
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</tbody>
</table>

Angled panels include one rear cable manager, designation labels, cable ties, and mounting hardware.  
Add “B” for bulk project pack of 5 panels (rear cable managers not included but can be ordered separately).  
Note: 1 RMS = 44.5mm

---

www.siemon.com
HD5 Quick-Patch™ Panel*

Siemon’s HD5 Quick-Patch panel provides a quick and easy category 5 channel patching solution for 10/100BASE-T hubs with 25-pair connectors. The HD5 Quick-Patch Panel incorporates many user-friendly features and benefits, including rear connectors that are staggered to enable easy routing of 25-pair cable to the connection point and a rear metal enclosure that protects printed circuitry. The black anodized panel can be mounted directly to a standard 19 inch rack or cabinet with the mounting hardware included. Icon/label holders and designation labels included.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>Panel includes icon/label holders, designation labels, and mounting hardware.</th>
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<tbody>
<tr>
<td>HD5-QP-48</td>
<td>48-port 10/100BASE-T panel (Active pins 1, 2, 3 &amp; 6 only), four 25-pair</td>
<td>Note: 1 RMS = 44.5mm (1.75 in.)</td>
</tr>
<tr>
<td></td>
<td>connectors (female), 2 RMS</td>
<td>*Not eligible for Premium 5e or Solution 5e warranty</td>
</tr>
</tbody>
</table>

CT® Patch Panels

Oversized CT Panels

Oversized CT panels are available for applications that require additional labeling space. They provide the same flexibility as our standard CT panels and feature a write-on designation surface above each coupler opening that may also be used as a space for adhering your own label. Siemon offers adhesive-backed label holders with replaceable write-on labels that mount above the entire row of CT couplers.

<table>
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<tr>
<th>Part #</th>
<th>Description</th>
<th>Maximum Quantity</th>
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<td>CT-PNL-24-ID</td>
<td>24-port panel</td>
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</tr>
<tr>
<td>CT-PNL-32</td>
<td>32-port panel</td>
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<td>CT-PNL-48</td>
<td>48-port panel</td>
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<td>CT-PNL-64</td>
<td>64-port panel</td>
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<tr>
<td>CT-PNL-96</td>
<td>96-port panel</td>
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*Number of ports when configured with two-port CT couplers.  
Note: 1 RMS = 44.5mm (1.75 in.)

CT Patch Panels

<table>
<thead>
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<th>Part #</th>
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<tr>
<td>CT-PNL-16</td>
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<td>CT-PNL-32</td>
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<td>CT-PNL-48</td>
<td>48-port panel</td>
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*Number of ports when configured with two-port CT couplers.  
Note: 1 RMS = 44.5mm (1.75 in.)

HD® 5e UTP Patch Panel on S89D Bracket

<table>
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<tr>
<th>Part #</th>
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<tbody>
<tr>
<td>HD5-9D-12</td>
<td>12-port category 5e UTP panel, T568A/B, mounted on S89D bracket</td>
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<tr>
<td></td>
<td>height: 254.0mm (10.0 in.), width: 85.9mm (3.38 in.), depth: 47.8mm (1.88 in.)</td>
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</table>

www.siemon.com
MAX® UTP Patch Panels

MAX UTP Patch Panels

<table>
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<tr>
<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>MX-PNL-16</td>
<td>16-port MAX patch panel, 1U</td>
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<tr>
<td>MX-PNL-24</td>
<td>24-port MAX patch panel, 1U</td>
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Panels include rear cable manager, designation labels, cable ties, and mounting hardware.

Note: 1U = 44.5mm (1.75 in.)

Angled MAX UTP Patch Panels

Siemon's MAX series angled patch panels route cables directly into the vertical cable managers, eliminating the need for horizontal cable management between panels.

<table>
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<th>Part #</th>
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<tr>
<td>MX-PNLA-24</td>
<td>24-port angled MAX UTP patch panel, 1U</td>
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<tr>
<td>MX-PNLA-48</td>
<td>48-port angled MAX UTP patch panel, 2U</td>
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Angled MAX panels are not compatible with shielded Z-MAX or TERA outlets. Use the angled TERA-MAX or Z-MAX shielded panel.

Angled MAX panels are not recommended for use with RS3 rack series. RS series racks are recommended.

Panels include mounting hardware. Rear cable manager not included.

Note: 1U = 44.5mm (1.75 in.)

MAX® In-Line Coupler Panel

Siemon’s In-Line Coupler Panel is a 1U patch panel that allows users the ability to patch on the front and rear of the patch panel with standard RJ45 patch cables.

<table>
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<th>Part #</th>
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<tr>
<td>MX-K-C5-IL-24</td>
<td>In-Line Coupler Panel, Cat 5e UTP, 1U, Black</td>
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<tr>
<td>MX-K-C6-IL-24</td>
<td>In-Line Coupler Panel, Cat 6 UTP, 1U, Black</td>
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Optional Accessories

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<tr>
<td>MX-PNL-LBL4*</td>
<td>10 sheets of laser printable labels for 16-port MAX panels</td>
</tr>
<tr>
<td>MX-PNL-LBL6*</td>
<td>10 sheets of laser printable labels for 24- and 48-port MAX panels</td>
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*Visit our web site or contact our Technical Support Department for labeling software.

www.siemon.com
**MC® 5e UTP Modular Cords**

Siemon uses the highest quality components combined with stringent manufacturing processes to produce the best performing, most durable modular patch cords available. The end result is a cord that exceeds all TIA/EIA and ISO/IEC component specifications for transmission performance.

**Bend Fatigue** — 24 AWG (7 strands @ 0.20mm) stranded wire for longer bend fatigue life

**High Performance** — MC 5e cords are constructed using high performance Siemon category 5e cable

**Latch Guard** — Exceed FCC CFR 47 part 68 subpart F and IEC 60803-7 specifications and have 50 microinches minimum of gold plating over nickel

**Factory Terminated**

Cords are tested to consistently achieve category 5e compatibility. Field termination is not recommended.

**Latch Guard**

The MC 5e boot design incorporates a latch guard to protect the plug latch from snagging when pulling cords through pathways or cable managers.

**Ordering Information:**

**MC5-8T-(XX)-(XX)-B(XX)C**

Category 5e UTP MC double-ended, 4-pair stranded modular cord, color matching jacket/boot, T568A/B, CMG

**Cord Color**

01 = Black
02 = White
03 = Red
04 = Gray
05 = Yellow
06 = Blue
07 = Green

**Cord Length**

03 = 0.9m (3 ft.)
05 = 1.5m (5 ft.)
07 = 2.1m (7 ft.)
10 = 3.1m (10 ft.)
15 = 4.6m (15 ft.)
20 = 6.1m (20 ft.)

Add “B” to end of part number for bulk project pack of 100 cords

**IC5-8(X)-(XX)-B(XX)C**

Category 5e IC, single-ended UTP solid cord blue jacket with colored boot

**Boot Coloring**

01 = Black
02 = White
03 = Red
04 = Gray
05 = Yellow
06 = Blue
07 = Green

**Wiring**

A = T568B
B = T568A

**Length**

10 = 3.1m (10 ft.)
20 = 6.1m (20 ft.)
30 = 9.1m (30 ft.)
40 = 12.2m (40 ft.)
50 = 15.2m (50 ft.)
60 = 18.3m (60 ft.)

**IC5-8(X)-(XX)-B(XX)C**

Category 5e IC, single-ended UTP solid cord blue jacket, no boot

**Wiring**

A = T568B
B = T568A

**Length**

10 = 3.1m (10 ft.)
20 = 6.1m (20 ft.)
30 = 9.1m (30 ft.)
40 = 12.2m (40 ft.)
50 = 15.2m (50 ft.)
60 = 18.3m (60 ft.)

**IC5-8(X)-B(XX)C**

Category 5e IC, single-ended UTP solid cord blue jacket, no boot

**Wiring**

A = T568B
B = T568A

**Length**

10 = 3.1m (10 ft.)
20 = 6.1m (20 ft.)
30 = 9.1m (30 ft.)
40 = 12.2m (40 ft.)
50 = 15.2m (50 ft.)
60 = 18.3m (60 ft.)

**Modular Plugs** — Exceed FCC CFR 47 part 68 subpart F and IEC 60803-7 specifications and have 50 microinches minimum of gold plating over nickel

**IC 5e Solid UTP Single-Ended Modular Cords**

Siemon’s solid, single-ended IC5e cable assemblies are designed for patching between the consolidation point and the work area (CMP) or as equipment cords in cross-connect applications (CMR). These assemblies are constructed using cable that exceeds all category 5e specifications.
**Premium 5e® UTP Cable (North America)**

**COMPLIANCE**
- ISO/IEC 11801:2002 (Category 5e)
- TIA568-C.2 (Category 5e)
- EIA 61156-5 (Category 5e)
- UL CMP and CSA FT6
- UL CMR and CSA FT4

**CABLE CONSTRUCTION**
- UTP
- 0.51mm (0.020 in.) (24 AWG) solid bare copper
- 4.9mm (0.194 in.) max jacket diameter

**ELECTRICAL SPECIFICATIONS**
- DC Resistance: <9.38Ω/100m
- DC resistance Unbalance: 5%
- Mutual Capacitance: 5.6 nF/100m
- Capacitance Unbalance: <300 pF/100m
- Characteristic Impedance (ohms):
  - CMP: 1-100 MHz: 100 ± 15%
  - CMR: 1-350 MHz: 100 ± 22%
- NVP: CMP - 70% CMR - 68%
- TCL: 40-10 x log(f) dB
- Delay Skew: ≤25ns

**PHYSICAL PROPERTIES**
- Pulling Tension (max):
  - CMP: 110N (25 lbf)
  - CMR: 110N (25 lbf)
- Bend Radius (min):
  - CMP: 20 mm (0.8 in.)
  - CMR: 20 mm (0.8 in.)
- Installation Temperature:
  - CMP: 0 to 60°C (+32 to 140°F)
  - CMR: 0 to 60°C (+32 to 140°F)
- Storage Temperature:
  - CMP: -20 to 75°C (-4 to 167°F)
  - CMR: -20 to 75°C (-4 to 167°F)
- Operating Temperature:
  - CMP: -20 to 60°C (-4 to 140°F)
  - CMR: -20 to 60°C (-4 to 140°F)

*Values above industry requirements are for information only. All performance based on 100 meters (328 ft.).

**TRANSMISSION PERFORMANCE**

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<th>Frequency (MHz)</th>
<th>Insertion Loss (dB)</th>
<th>NEXT (dB)</th>
<th>PS NEXT (dB)</th>
<th>ACR (dB)</th>
<th>PSACR (dB)</th>
<th>ACR-F (dB)</th>
<th>PS ACR-F (dB)</th>
<th>Return Loss (dB)</th>
<th>Propagation Delay (ns)</th>
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</tbody>
</table>

*Values above industry requirements are for information only. All performance based on 100 meters (328 ft.).

www.siemon.com
## Premium 5e® UTP Cable (International)

### COMPLIANCE
- ISO/IEC 11801: Ed 2.2 (Class D)
- IEC 61156-6-5 (Category 5e)
- IEEE 802.3
- TIA-568-C.2 (Category 5e)
- UL CM
- UL CMR and CSA FT4
- LSOH: IEC 60332-1, IEC 60754, AND IEC 61034

### CABLE CONSTRUCTION
- **UTP**
  - Nominal jacket OD: 5mm
  - 0.5mm solid (non-tinned) copper (24 AWG)
  - Reverse sequential numbering

### ELECTRICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>LSZH</th>
<th>CM/CMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulling Tension (max)</td>
<td>110N</td>
<td>110N</td>
</tr>
<tr>
<td>Bend Radius (min)</td>
<td>25mm</td>
<td>25mm</td>
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<tr>
<td>Installation Temperature</td>
<td>0 to 60°C</td>
<td>0 to 60°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
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<td>-20 to 75°C</td>
</tr>
<tr>
<td>Operating Temperature</td>
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### PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Parameter</th>
<th>LSZH</th>
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<td>Pulling Tension (max)</td>
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<tr>
<td>Operating Temperature</td>
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### TRANSMISSION PERFORMANCE

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<tr>
<th>Frequency (MHz)</th>
<th>Insertion Loss (dB)</th>
<th>NEXT (dB)</th>
<th>PS NEXT (dB)</th>
<th>ACR (dB)</th>
<th>PSACR (dB)</th>
<th>ACR-F (dB)</th>
<th>PS ACR-F (dB)</th>
<th>Return Loss (dB)</th>
<th>Propagation Delay (ns)</th>
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</table>

*Values above 100 MHz are for information only.

All performance based on 100 metres (328 ft.).
Solution 5e™ UTP Cable (North America)

**COMPLIANCE**
- ISO/IEC 11801:2002 (Category 5e)
- TIA568-C.2 (Category 5e)
- IEC 61156-5 (Category 5e)
- UL CMP and CSA FT6

**CABLE CONSTRUCTION**
- UTP
- 0.51mm (0.020 in.) (24 AWG) solid bare copper
- 4.6mm (0.180 in.) max jacket diameter

**ELECTRICAL SPECIFICATIONS**

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<thead>
<tr>
<th>Description</th>
<th>Part #</th>
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<tbody>
<tr>
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<td>9C5P4-E1-(XX)-RXA . . . . . . . . . Plenum (1000 ft.), Reelex</td>
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Use (XX) to specify jacket color: 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green

**TRANSMISSION PERFORMANCE**

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Insertion Loss (dB/100m)</th>
<th>NEXT (dB)</th>
<th>PS NEXT (dB)</th>
<th>ACR-N (dB)</th>
<th>PS ACR-N (dB)</th>
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<td>31.3</td>
<td>20.2</td>
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*Values above industry requirements are for information only. All performance based on 100 meters (328 ft.).

**PHYSICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Description</th>
<th>CMP</th>
<th>CMB</th>
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<tr>
<td>Pulling Tension (max)</td>
<td>110N (25 lbf)</td>
<td>110N (25 lbf)</td>
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<tr>
<td>Bend Radius (min)</td>
<td>25 mm (1 in.)</td>
<td>25 mm (1 in.)</td>
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<tr>
<td>Installation Temperature</td>
<td>0 to 60°C (+32 to 140°F)</td>
<td>0 to 60°C (+32 to 140°F)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-20 to 75°C (-4 to 167°F)</td>
<td>-20 to 75°C (-4 to 167°F)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20 to 60°C (-4 to 140°F)</td>
<td>-20 to 60°C (-4 to 140°F)</td>
</tr>
</tbody>
</table>

**DC Resistance**
- <9.38Ω/100m

**DC resistance Unbalance**
- 5%

**Mutual Capacitance**
- 5.6 nF/100m

**Capacitance Unbalance**
- <330 pF/100m

**Characteristic Impedance (ohms)**
- 100 ± 15%

**NVP**
- CMP - 70% CMR - 68%

**Delay Screw**
- ≤45ns

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Category 5e UTP Cross-Connect Wire

Siemon’s cross-connect wire utilizes a unique "webbing" manufacturing process which binds conductors of a twisted-pair together to maintain consistent conductor spacing and pair twists that will not loosen during cross-connect installation. This high performance product exceeds category 5e specifications and is ideal for use with our S66™ and S110® wiring blocks.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ5-W2-1000</td>
<td>Category 5e, 2-pair 24 AWG (0.51mm) webbed cross-connect wire, pair colors blue/orange, 305m (1,000 ft.) spool</td>
</tr>
<tr>
<td>CJ5-W2-1000-07</td>
<td>Category 5e, 2-pair 24 AWG (0.51mm) webbed cross-connect wire, pair colors orange/green, 305m (1,000 ft.) spool</td>
</tr>
<tr>
<td>CJ5-W1-1000-03</td>
<td>Category 5e, 1-pair 24 AWG (0.51mm) webbed cross-connect wire with red/white conductors, 305m (1,000 ft.) spool</td>
</tr>
<tr>
<td>CJ5-W1-1000-06</td>
<td>Category 5e, 1-pair 24 AWG (0.51mm) webbed cross-connect wire with blue/white conductors, 305m (1,000 ft.) spool</td>
</tr>
</tbody>
</table>
Siemon's S110 connecting block systems and accessories combine category 5e performance with user-friendly installation features.

- Multi-application support — Ideal for use in cross-connect and consolidation point applications
- Durable design — Rugged high impact, flame-retardant polycarbonate easily withstands force of impact tools
- Full line — Complete system includes field terminated and pre-wired blocks, connecting blocks, patch cords, cable managers and more.

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- S110 Wiring Blocks . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .5.14
- Vertical S110 Wiring Blocks . . . . . . . . . . . . . . . . . . . . . . .5.14
- S110 19 Inch Field Termination Panels . . . . . . . . . . . . . . . . .5.15
- S110 Labels . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .5.15
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- S110 to MC® Cable Assemblies . . . . . . . . . . . . . . . . . . . . . .5.16
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- S110 Tower Modular Jack Panels . . . . . . . . . . . . . . . . . . . . .5.21
S110® Connection System

Siemon S110 field termination kits combine category 5e performance with unparalleled installation features. Each kit includes connecting blocks to complete each 25-pair termination strip on the S110 wiring block.

Patented Cable Access Openings
Allow cables to be routed through the rear of the block directly to the point of termination.

Detachable Blocks
Another patented Siemon innovation allows 50- and 100-pair wiring blocks to be detached from their mounting legs providing easy access to cables.

Labeling
Designation strips with interchangeable colored labels can be mounted in the center and/or outside positions.

S110 Field Termination Kits

Complete S110 installation kits include S110 wiring blocks with detachable legs*, S110 connecting blocks, and label holders with white designation labels.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>S110A(X)1-50FT</td>
<td>50-pair S110 field termination kit</td>
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<td>width: 272mm (10.71 in.),</td>
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<td>100-pair S110 field termination kit</td>
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<td>height: 91.4mm (3.60 in.),</td>
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<td>width: 272mm (10.71 in.),</td>
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<td></td>
<td>depth: 82.8mm (3.26 in.)</td>
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</table>

Use (X) to specify connecting block size: A = 5-pair, B = 4-pair
*Legs detachable on 50- and 100-pair version only.

www.siemon.com
**S110® Connecting Blocks**

Siemon category 5e S110C blocks terminate 22-26 AWG (0.64mm-0.40mm) solid or 7-strand wires. They also offer markings to designate tip and ring conductors and color-coded pairs on each block and a patented single-piece, robust construction.

![S110C-4](image)
4-pair connecting block, blue/orange/green/brown

![S110C-5](image)
5-pair connecting block, blue/orange/green/brown/slate

**S110 Wiring Blocks**

### Wiring Blocks With Legs
- **S110AW1-50**
  - 50-pair, 110 wiring block with legs
  - height: 45.7mm (1.80 in.),
  - width: 272mm (10.71 in.),
  - depth: 82.8mm (3.26 in.)
- **S110AW2-100**
  - 100-pair, 110 wiring block with legs
  - height: 91.4mm (3.60 in.),
  - width: 272mm (10.71 in.),
  - depth: 82.8mm (3.26 in.)
- **S110AW2-200**
  - 200-pair, 110 wiring block with legs
  - height: 182.9mm (7.20 in.),
  - width: 272mm (10.71 in.),
  - depth: 82.8mm (3.26 in.)
- **S110AW2-300**
  - 300-pair, 110 wiring block with legs
  - height: 274.3mm (10.80 in.),
  - width: 272mm (10.71 in.),
  - depth: 82.8mm (3.26 in.)

### Wiring Blocks Without Legs
- **S110DW1-25**
  - 25-pair, 110 wiring block without legs
  - height: 16.0mm (0.63 in.),
  - width: 216mm (8.50 in.),
  - depth: 35.8mm (1.41 in.)
- **S110DW1-50**
  - 50-pair, 110 wiring block without legs
  - height: 42.4mm (1.67 in.),
  - width: 216mm (8.50 in.),
  - depth: 35.8mm (1.41 in.)
- **S110DW2-100**
  - 100-pair, 110 wiring block without legs
  - height: 88.1mm (3.47 in.),
  - width: 216mm (8.50 in.),
  - depth: 35.8mm (1.41 in.)

**Vertically Mounted S110 Blocks**

This 50-pair S110 block can be mounted on the same S89B or S89D brackets that hold our S66™ blocks. The wiring base is available separately or as part of a field-terminated kit that includes the 4- or 5-pair connecting blocks and designation strips.

**Part #**
- S110DW1-50-89
- S110D(X)1-50FT-89

**Description**
- S110 connecting blocks are not included
- S110C-4 4-pair connecting block, blue/orange/green/brown
- S110C-5 5-pair connecting block, blue/orange/green/brown/slate

*Use (X) to specify connecting blocks: A = 5-pair, B = 4-pair*

*S89 brackets are not included and must be ordered separately.*

**Part #**
- S110DW1-50-89
- S110D(X)1-50FT-89

**Description**
- 50-pair S110 wiring base on an 89-type retainer.
- 50-pair S110 field termination kit on an 89-type retainer.
- Includes S110 connecting blocks and designation strips
- (dimensions include S89 bracket)
**S110® 19 Inch Field Termination Panels**

S110 panels allow wiring blocks to be mounted directly to a 19 inch CEA rack or cabinet. Each panel includes adequate connecting blocks to complete each 25-pair termination strip on the S110 block (e.g., S110DB1-100RFT would include five 4-pair and one 5-pair connecting block per 25-pair termination strip, or a total of twenty 4-pair and four 5-pair connecting blocks).

<table>
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<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>S110D(X)1-100RFT</td>
<td>100-pair, 19 inch panel, S110 field termination kit, 1U with cable managers and covers</td>
<td>2</td>
</tr>
<tr>
<td>S110D(X)1-200RFT</td>
<td>200-pair, 19 inch panel, S110 field termination kit, 2U with cable managers and covers</td>
<td>3</td>
</tr>
<tr>
<td>S110D(X)1-300RFT</td>
<td>300-pair, 19 inch panel, S110 field termination kit, 3U with cable managers and covers</td>
<td>3</td>
</tr>
</tbody>
</table>

Use (X) to specify connecting block size: A = 5-pair, B = 4-pair
Note: 1 RMS = 44.5mm (1.75 in.)

**Field Terminated S110 19 Inch Panels with Cable Managers**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>RMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>S110D(X)2-100RWM</td>
<td>100-pair, 19 inch panel, S110 field termination kit, 1U with cable managers and covers</td>
<td>2</td>
</tr>
<tr>
<td>S110D(X)2-200RWM</td>
<td>200-pair, 19 inch panel, S110 field termination kit, 2U with cable managers and covers</td>
<td>3</td>
</tr>
</tbody>
</table>

Use (X) to specify the connecting blocks: A = 5-pair, B = 4-pair
Note: 1 RMS = 44.5mm (1.75 in.)

**S110 Designation Labels**

Siemon S110 wiring blocks allow designation labels to be mounted between each row of connecting blocks. Each label has 2-, 3-, 4-, and 5-pair markings and may be used for color-coding services in accordance with TIA/EIA-606-A.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S110-HLDR</td>
<td>Transparent plastic label holders, bag of 6</td>
</tr>
<tr>
<td>S110-LBL-(X)</td>
<td>2-, 3-, 4-, and 5-pair marked colored labels, bag of 6</td>
</tr>
</tbody>
</table>

Use (X) to specify color: 2 = white, 3 = red, 4 = gray, 5 = yellow, 6 = blue, 7 = green, 8 = violet, 9 = orange, 80 = brown
### S110 Patch Plugs

Siemon S110 patch plugs are both category 5e compliant and can be field-terminated to either solid or stranded cable. 4-pair S110 patch plugs employ a patented design to improve electrical isolation between pairs, enhancing cross-talk performance so that the mated plug and connecting block significantly exceed category 5e transmission requirements.

#### S110P4
4-pair, field-terminated, S110 patch plug

#### S110P2
2-pair, field-terminated, S110 patch plug

#### S110P1
1-pair, field-terminated, S110 patch plug

**Add “-B” to end of part number for bulk project pack of 100 patch plugs.**

*S110P1 includes protective insert for use with single pair cross-connect wire. Colored icons are available for color-coding 4-pair S110 plugs (sold separately)*

### S110 Cable Assemblies

The S110 cable assemblies utilize Siemon’s S110P4 patch plugs for easy and reliable connections between S110 termination fields. These assemblies use high performance stranded cable which exceeds category 5e specifications and are factory transmission tested to ensure optimum category 5e channel performance. Colored icons are available for color-coding 4-pair S110 plugs.

#### Part # Description

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S110P4-P4-(XX)</td>
<td>4-pair, double-ended stranded S110 cord, CMG</td>
</tr>
<tr>
<td>S110P2-P2-(XX)</td>
<td>2-pair, double-ended stranded S110 cord, CMG</td>
</tr>
<tr>
<td>S110P1-P1-(XX)</td>
<td>1-pair, double-ended stranded S110 cord, CMG</td>
</tr>
</tbody>
</table>

Use (XX) to specify length: 03 = 0.91m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.13m (7 ft.), 10 = 3.05m (10 ft.), 15 = 4.57m (15 ft.), 20 = 6.10m (20 ft.)

### S110 to MC® Cable Assemblies

The S110 to modular cable assemblies combine Siemon’s high performance modular plugs for patching network equipment to S110 connecting blocks or providing test access to S110 termination fields. The combination of plugs, high performance cable and factory transmission testing ensures performance is compatible with Premium 5e or lower systems.

#### Part # Description

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S110P4-A4-(XX)</td>
<td>Category 5e, 4-pair, S110-to-modular plug, T568B, standard cable assembly, CMG</td>
</tr>
<tr>
<td>S110P4-T4-(XX)</td>
<td>Category 5e, 4-pair, S110-to-modular plug, T568A, standard cable assembly, CMG</td>
</tr>
<tr>
<td>S110P2-UT-(XX)</td>
<td>Category 5e, 2-pair, S110-to-modular 8-position plug, Token Ring, T568A, standard cable assembly, CMG</td>
</tr>
<tr>
<td>S110P2-E2-(XX)</td>
<td>Category 5e, 2-pair, S110-to-modular 8-position plug, 10/100BASE-T, T568B, standard cable assembly, CMG</td>
</tr>
<tr>
<td>S110P1-U1-(XX)</td>
<td>Category 5e, 1-pair, S110-to-modular 6-position plug, USOC, standard cable assembly, CMG</td>
</tr>
<tr>
<td>S110P1-U4-(XX)</td>
<td>Category 5e, 1-pair, S110-to-modular 8-position plug, USOC, standard cable assembly, CMG</td>
</tr>
</tbody>
</table>

Use 1st (XX) to specify length: 03 = 0.91m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.13m (7 ft.), 10 = 3.05m (10 ft.), 15 = 4.57m (15 ft.), 20 = 6.10m (20 ft.)
## S110® Tower Kits

### S110 Tower Field Termination Kits

The S110 Tower System provides a modular high-density cross-connect cable management system. S110 Tower Systems are shipped unassembled to simplify field assembly and termination.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>Height (mm)</th>
<th>Width (mm)</th>
<th>Depth (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S110M(X)2-300FT</td>
<td>300-pair S110 Tower field termination kit</td>
<td>406.4</td>
<td>215.9</td>
<td>152.6</td>
</tr>
<tr>
<td>S110M(X)2-400FT</td>
<td>400-pair S110 Tower field termination kit</td>
<td>541.3</td>
<td>215.9</td>
<td>152.6</td>
</tr>
<tr>
<td>S110M(X)2-500FT</td>
<td>500-pair S110 Tower field termination kit</td>
<td>676.1</td>
<td>215.9</td>
<td>152.6</td>
</tr>
</tbody>
</table>

Use (X) to specify connecting block size: A = 5-pair, B = 4-pair

### S110 Tower Optional Accessories

<table>
<thead>
<tr>
<th>S188-300</th>
<th>Large-scale vertical cable manager for use with 300-pair Tower height: 406.4mm (16.0 in.), width: 215.9mm (8.5 in.), depth: 190.5mm (7.5 in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S188-400</td>
<td>Large-scale vertical cable manager for use with 400-pair Tower height: 541.3mm (21.3 in.), width: 215.9mm (8.5 in.), depth: 190.5mm (7.5 in.)</td>
</tr>
<tr>
<td>S188-500</td>
<td>Large-scale vertical cable manager for use with 500-pair Tower height: 676.1mm (26.6 in.), width: 215.9mm (8.5 in.), depth: 190.5mm (7.5 in.)</td>
</tr>
<tr>
<td>S188-WD</td>
<td>Metal duct for additional horizontal cable management at base of Tower height: 114.3mm (4.5 in.), width: 215.9mm (8.5 in.), depth: 203.2mm (8.0 in.)</td>
</tr>
<tr>
<td>S110M-WM-300</td>
<td>Small-scale vertical cable manager for use with 300-pair Tower height: 406.0mm (16.0 in.), width: 76.2mm (3.0 in.), depth: 153.0mm (6.1 in.)</td>
</tr>
<tr>
<td>S110M-WM-400</td>
<td>Small-scale vertical cable manager for use with 400-pair Tower height: 541.2mm (21.3 in.), width: 76.2mm (3.0 in.), depth: 153.0mm (6.1 in.)</td>
</tr>
<tr>
<td>S110M-WM-500</td>
<td>Small-scale vertical cable manager for use with 500-pair Tower height: 675.9mm (26.6 in.), width: 76.2mm (3.0 in.), depth: 153.0mm (6.1 in.)</td>
</tr>
<tr>
<td>S188-GND</td>
<td>Ground kit consists of one, 3-position grounding busbar height: 9.0mm (0.4 in.), width: 50.8mm (2.0 in.), depth: 12.3mm (0.5 in.)</td>
</tr>
</tbody>
</table>

www.siemon.com
**XLBET Frame**

The Siemon XLBET (Extra Large Building Entrance Terminal) frames are designed for use in large installations where space is a premium. Compatible with Siemon’s vertical patching (VPC-6) and cable management (RS-CNL) channels.

### XLBET Frame

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XL-(XX)00</td>
<td>7 ft. x 23 in. XLBET frame. Includes rack, wire management and mounting hardware. S110° wiring blocks not included height: 2133.6mm (84.00 in.), width: 617.5mm (24.31 in.), depth: 406.4mm (16.00 in.)</td>
</tr>
</tbody>
</table>

Use (XX) to specify pair count: 36 = 3600-pair, 72 = 7200-pair

### XLBET Frame with S110 Wiring Blocks

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XL-(XX)00-W</td>
<td>7 ft. x 23 in. XLBET frame. Includes rack, wire management, S110 wiring blocks, clear designation holders, labels, and mounting hardware (S110 connecting blocks not included)</td>
</tr>
</tbody>
</table>

Use (XX) to specify pair count: 36 = 3600-pair, 72 = 7200-pair

### Optional Accessories

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XL-CK</td>
<td>Concrete mounting kit. Includes hardware to secure one 23 or 35 inch XLBET frame to a concrete floor</td>
</tr>
<tr>
<td>XL-(X)-3600</td>
<td>S110 connecting block kit. Includes the appropriate number of 4- or 5-pair connecting blocks to fully populate a 3600-pair frame. Two kits can be ordered for 7200-pair frames</td>
</tr>
</tbody>
</table>

Use (X) to specify connecting blocks: A = 5-pair, B = 4-pair
Pre-Wired S110° Blocks

For quick, simple connection to phone equipment, the pre-wired S110 blocks provide connectorized 25-pair tails wired to 100- or 300-pair bases. The standard 6 in. (152mm) tails can be ordered extending from the top or bottom of the block with male or female connectors.

Use 1st (X) to specify connecting block subassembly: A = 5-pair, B = 4-pair
Use (XXX) to specify connector type:
CT = connectorized top (female),
CTM = connectorized top (male),
CB = connectorized bottom (female),
CBM = connectorized bottom (male)
Use 2nd (X) to specify cable length:
Blank = standard 152mm (6 in.) tail,
(X) = custom length, in feet

S110A(X)-100(XXX)-(X) . . . . . . 100-pair S110 pre-wired block
S110A(X)-300(XXX)-(X) . . . . . . 300-pair S110 pre-wired block

The pre-wired S110 block is ideal for use with phone systems due to its ability to easily accommodate connectorized 25-pair cables for fast and simple setup. In addition, the use of 25-pair cable for backbone cabling allows the pre-wired S110 block to provide an easy interface with your phone system all the way to the telecommunications room where connections can be made to the work area.
Pre-Wired S110® Blocks

Siemon's S700 series blocks provide a simple interface method between 25-pair assemblies and punchdown fields using easily accessible connections. The blocks feature both fields on the face of the block eliminating the need to trace cables or access the rear of the block when making connections. Each block comes with label holders and white designation labels as well as hook and loop hold-downs to secure the 25-pair connectors.

Part # Description
S700A110-B1-50 . . . . . . . . . . . . 50-pair pre-wired S110 block with legs
  height: 91.4mm (3.60 in.),
  width: 272mm (10.71 in.),
  depth: 82.8mm (3.26 in.)

Pre-Wired S110 Panels

S110 pre-wired panels mount directly to a 19 inch EIA rack. The panels are available in either 100-, 200-, or 300-pair configurations pre-wired to female 25-pair connectors with black universal connector hold-downs. For optimum transmission performance, pre-wired blocks may be ordered with the pair twisting maintained between the wiring block and the connector. Each panel comes complete with mounting hardware, label holders, and white designation labels.

Part # Description             RMS
S110D(X)(Y)-100RCT . . . . . . . . 100-pair pre-wired S110 panel, with 25-pair connectors
  (X) = 5-pair, (Y) = twisted-pairs
S110D(X)(Y)-200RCT . . . . . . . . 200-pair pre-wired S110 panel, with 25-pair connectors
  (X) = 5-pair, (Y) = twisted-pairs
S110D(X)(Y)-300RCT . . . . . . . . 300-pair pre-wired S110 panel, with 25-pair connectors
  (X) = 5-pair, (Y) = twisted-pairs

Use (X) to specify the connecting blocks: A = 5-pair, B = 4-pair
Use (Y) to specify twisted-pair option: T = twisted-pairs
Note: 1 RMS = 44.5mm (1.75 in.)
## S110® Modular Jack Blocks and Panels

### S110 Modular Jack Wall Mount Blocks

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S110AB5-50JP</td>
<td>6-port, T568A/B, with detachable legs height: 45.7mm (1.80 in.), width: 272mm (10.71 in.), depth: 82.8mm (3.26 in.)</td>
</tr>
<tr>
<td>S110AB5-100JP</td>
<td>12-port, T568A/B, with detachable legs height: 91.4mm (3.60 in.), width: 272mm (10.71 in.), depth: 82.8mm (3.26 in.)</td>
</tr>
<tr>
<td>S110AB5-200JP</td>
<td>24-port, T568A/B, with permanent legs height: 183mm (7.20 in.), width: 272mm (10.71 in.), depth: 82.8mm (3.26 in.)</td>
</tr>
<tr>
<td>S110AB5-300JP</td>
<td>36-port, T568A/B, with permanent legs height: 274.3mm (10.8 in.), width: 272mm (10.71 in.), depth: 82.8mm (3.26 in.)</td>
</tr>
</tbody>
</table>

### Rack Mount Panels

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S110DB5-24RJP</td>
<td>24-port jack panel, on a 19 inch panel, T568A/B, 2 RMS height: 183mm (7.20 in.), width: 272mm (10.71 in.), depth: 82.8mm (3.26 in.)</td>
</tr>
</tbody>
</table>

### Vertical Mount Panels

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S110DB5-50JP89</td>
<td>6-port, T568A/B for mounting on S89 bracket height: 254.0mm (10.00 in.), width: 85.9mm (3.38 in.), depth: 86.6mm (3.41 in.)</td>
</tr>
</tbody>
</table>

Note: 1 RMS = 44.5mm (1.75 in.)

*S89 brackets are not included and must be ordered separately.

### S110 Tower Modular Jack Panels

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S110MB5-(XXX)JP</td>
<td>S110 Tower modular jack panel kit, T568A/B Use (XXX) to specify port counts: 300 = 36 ports, height: 406.4mm (16.0 in.), width: 215.9mm (8.5 in.), depth: 152.6mm (6.0 in.) 400 = 48 ports, height: 541.3mm (21.3 in.), width: 215.9mm (8.5 in.), depth: 152.6mm (6.0 in.) 500 = 60 ports, height: 676.1mm (26.6 in.), width: 215.9mm (8.5 in.), depth: 152.6mm (6.0 in.)</td>
</tr>
</tbody>
</table>

www.siemon.com
S66™ Connecting Block System

The Siemon S66 connecting block system is a proven, economical connecting block solution supporting up to category 5e performance levels. It’s familiar, user-friendly termination features, reliable performance and wide range of styles and configurations make the 66 block an ideal choice for supporting technologies such as analog voice, Voice over IP (VoIP) and Gigabit ethernet. The Siemon S66 block system is supported by a full range of mounting, cable management, labeling and over voltage protection accessories.

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S66™ Connecting Block System

Field-Terminated M Series S66 Blocks

4 x 50 Blocks

- S66M1-50
  - Pair Capacity: 50,
  - Quick Clip: 500
  - height: 254mm (10 in.),
  - width: 86.4mm (3.4 in.),
  - depth: 30.5mm (1.2 in.)

- S66M1-25
  - Pair Capacity: 25,
  - Quick Clip: 569
  - height: 254mm (10 in.),
  - width: 86.4mm (3.4 in.),
  - depth: 24.6mm (1.0 in.)

- S66M1-100
  - Pair Capacity: 100,
  - Quick Clip: 279MS*
  - height: 254mm (10 in.),
  - width: 86.4mm (3.4 in.),
  - depth: 30.5mm (1.2 in.)

4 x 25 Blocks

- S66M4-12
  - Pair Capacity: 12,
  - Quick Clip: 569
  - height: 127mm (5 in.),
  - width: 53.3mm (2.1 in.),
  - depth: 30.5mm (1.2 in.)

- S66M4-24
  - Pair Capacity: 24,
  - Quick Clip: 571
  - height: 127mm (5 in.),
  - width: 53.3mm (2.1 in.),
  - depth: 30.5mm (1.2 in.)

- S66M4-50
  - Pair Capacity: 50,
  - Quick Clip: 279MS*
  - height: 127mm (5 in.),
  - width: 53.3mm (2.1 in.),
  - depth: 30.5mm (1.2 in.)

6 x 25 Blocks

- S66M6-24
  - Pair Capacity: 24,
  - Quick Clip: 843
  - height: 127mm (5 in.),
  - width: 71.1mm (2.8 in.),
  - depth: 30.5mm (1.2 in.)

- S66M6-36
  - Pair Capacity: 36,
  - Quick Clip: 842
  - height: 127mm (5 in.),
  - width: 71.1mm (2.8 in.),
  - depth: 30.5mm (1.2 in.)

- S66M6-75
  - Pair Capacity: 75,
  - Quick Clip: 279MS*
  - height: 127mm (5 in.),
  - width: 71.1mm (2.8 in.),
  - depth: 30.5mm (1.2 in.)

*All connecting blocks that use the 279MS quick clip have a tail pin that protrudes 3.3mm (0.13 in.) below the retainer base.

Note: Center-to-center vertical spacing between rows of clips is 6.4mm (0.25 in.).
Pre-Wired M2 Series

S66M2-3W . . . . . . . . . . .
Pair Capacity: 25
One female 25-pair connector

S66M2-5W . . . . . . . . . . .
Pair Capacity: 50
Two female 25-pair connectors

Add “B” for back mounted connector (not shown), add “M” for male connector. Please call for connector/block compatibility. Note: all connector options not available for all blocks.

Pre-Wired M4 Series

S66M4-2W . . . . . . . . . . .
Pair Capacity: 50 (bridged)
Two female 25-pair connectors

S66M4-4W . . . . . . . . . . .
Pair Capacity: 100 (unbridged)
Four female 25-pair connectors

Add “B” for back mounted connector (not shown), add “M” for male connector. Please call for connector/block compatibility. Note: all connector options not available for all blocks.

Pre-Wired 157 Series

157A . . . . . . . . . . . . . . .
Pair Capacity: 25
One male 25-pair connector

157B . . . . . . . . . . . . . . . .
Pair Capacity: 50 (unbridged)
Two male 25-pair connectors

157C . . . . . . . . . . . . . . . .
Pair Capacity: 50 (unbridged)
Two female 25-pair connectors

Add “B” for back mounted connector (not shown), add “M” for male connector. Please call for connector/block compatibility. Note: all connector options not available for all blocks.
Modular Jack Blocks

S66M2-5T-68L . . . . . . . . . . . . . . .
Six 8-position, 4-pair modular jacks, T568B

S66M2-5T-124LR . . . . . . . . . . . . . .
Twelve 6-position, 2-pair modular jacks, USOC

Pre-Wired Modular Jack Blocks

S66M2-5T-84L . . . . . . . . . . . . . . .
Eight 6-position, 2-pair modular jacks, USOC

S66M2-5T-66L . . . . . . . . . . . . . . .
Eight 6-position, 3-pair modular jacks, USOC

S66M2-5T-128LR . . . . . . . . . . . . . .
Twelve 8-position, 4-pair modular jacks, T568B

S66M2ST-124LR-125R . . . . . . . . . . . .
Twelve 6-position, 2-pair modular jacks, one 25-pair female connector, USOC

End view of blocks with modular jacks

End view of blocks with modular jacks and a 25-pair connector
Modular Patch Blocks®

Our economical Modular Patch Blocks provide a convenient 24-port modular cross-connect field for equipment with 25-pair female connector input. They are excellent for use with voice, broadcast, or alarm systems. The blocks fit a standard 66M block footprint for backboard or rack mounting applications.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPB-V1</td>
<td>One, 25-pair connector wired to 24, 1-pair 6-position modular jacks, USOC.</td>
</tr>
<tr>
<td></td>
<td>Black universal hold-down</td>
</tr>
</tbody>
</table>

S66M425-2T2-8

This block is pre-wired to eight 6-position, 2-pair modular cords, each 0.61m (2 ft) long, and it is also equipped with an S89E bracket, clear plastic cover, and designation labels. It is ideal for use with 2-pair key systems that have modular jacks. Two-pair station cables are punched down on the face of the block and the modular cords are plugged into the ports of the key service unit.

S66M1-50-3T25

Designed for use with key systems that have a 25-pair male connector, this block is also ideal for 10BASE-T hubs that have a 25-pair male connector. It provides a 0.91m (3 ft) long, high-performance 25-pair cable (female) that is category 3 compliant, punched down to Row D. Also comes with a protective cover and labels for 2- and 3-pair systems.

Add “M” for male connector.
Network Interface Block - S66M1-50R

The M1-50 block with one female 25-pair connector is oriented for bottom cable entry and pre-wired to Row D. Uses S89D bracket (included) and blue/white wiring between 25-pair connector and S66 quick clip. Orange hinged cover included.

Add “M” for male connector.

Network Interface Block - 700A-66-B1-25

Same as S66M1-50R except it uses S89B bracket and color-coded 25-pair cable between 25-pair connector and S66™ quick clips.

S66M425-128LR

Designed for use with 4-pair key systems with modular jack connectors on the equipment. This block has twelve, 4-pair modular jacks wired to T568B specifications. It is also useful for 10BASE-T systems that use modular jack outputs. Jacks and the S66 block are mounted on a printed circuit board and are clearly labeled. The block is mounted on an S89E bracket and can be removed for cable management.
# Field-Terminated B Series S66™ Blocks

## 6 x 4 Blocks
- **S66B4-2**
  - Pair Capacity: 2,
  - Quick Clip: 848
  - **Dimensions:**
    - Height: 48.3 mm (1.9 in.),
    - Width: 71.1 mm (2.8 in.),
    - Depth: 30.5 mm (1.2 in.)

## 6 x 6 Blocks
- **S66B1-6**
  - Pair Capacity: 6,
  - Quick Clip: 848
- **S66B1-12**
  - Pair Capacity: 12,
  - Quick Clip: 843
  - **Dimensions:**
    - Height: 99.1 mm (3.9 in.),
    - Width: 71.1 mm (2.8 in.),
    - Depth: 30.5 mm (1.2 in.)

## 6 x 12 Blocks
- **S66B4-3**
  - Pair Capacity: 3,
  - Quick Clip: 848
- **S66B3-4**
  - Pair Capacity: 4,
  - Quick Clip: 843
- **S66B3-6**
  - Pair Capacity: 6,
  - Quick Clip: 843
  - **Includes:** CV-6 cover (see page 11.13)
- **S66B3-50**
  - Pair Capacity: 50,
  - Quick Clip: 843
- **S66B3-75**
  - Pair Capacity: 75,
  - Quick Clip: 842

## 6 x 50 Blocks
- **S66B4-25**
  - Pair Capacity: 25,
  - Quick Clip: 848
- **S66B3-50**
  - Pair Capacity: 50,
  - Quick Clip: 843
- **S66B3-75**
  - Pair Capacity: 75,
  - Quick Clip: 842

---

**Note:** Center-to-center vertical spacing between rows of clips is 6.4 mm (0.25 in.).
Stand-Off Brackets for S66™ Blocks

All of our brackets are designed to create clean, efficient, and space-saving installations when used with S66 connecting blocks. They are open-ended to enable installers to lay in cable before snapping a block into place. 25-pair connectors and/or modular components can be mounted on the sides or back of the brackets. The brackets are molded from flame retardant thermoplastic.

The stand-off brackets (S89D shown) allow cables to be routed behind blocks and provide a means to route cables to the front of the block for termination.

*The M1-100 can only be used with the S89D bracket.

---

Which bracket do you need?
It depends on the block you’re ordering …

<table>
<thead>
<tr>
<th>Block Type</th>
<th>Bracket</th>
</tr>
</thead>
<tbody>
<tr>
<td>M4 X 50*</td>
<td>S89B or S89D</td>
</tr>
<tr>
<td>M4 X 25</td>
<td>S89E</td>
</tr>
<tr>
<td>M6 X 25</td>
<td>S89F</td>
</tr>
<tr>
<td>B6 X 50</td>
<td>S86</td>
</tr>
<tr>
<td>All other B-type</td>
<td>S88-10</td>
</tr>
</tbody>
</table>

---

Technical Tip!
When mounting blocks end-to-end using S88-10 brackets, use three brackets for two blocks, four brackets for three blocks and so on.

www.siemon.com
# Cross-Connect (CC) Frames

For mid-to-large cross-connect installations these cable manager assemblies provide efficient and effective wire management on the CC Frames. They may be mounted either flush to a wall or on a relay rack.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>RMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC-2005-144</td>
<td>Cable manager with five S144 managers</td>
<td>2</td>
</tr>
<tr>
<td>CC-2005-145</td>
<td>Cable manager with five S145 managers</td>
<td>2</td>
</tr>
<tr>
<td>CC-2005-146</td>
<td>Cable manager with five S146 managers</td>
<td>2</td>
</tr>
</tbody>
</table>

Note: 1 RMS = 44.5mm (1.75 in.)

---

**CC Frame Cable Manager Assemblies**

 Frames Only

 Frames with Brackets

 Frames with Brackets and Top Spools

 Frames with Brackets and Bottom Spools

 CC-2024-NS-NB          Full size frame (8 bracket capacity)
 CC-2024-NS-DC          Full size frame, S89D Brackets (8)
 CC-2024-TS-DC          Full size frame, S89D Brackets (8), top spool
 CC-2024-TB-DC          Full size frame, S89D Brackets (8), top & bottom spools

 CC-2014-NS-NB          Half size frame (4 bracket capacity)
 CC-2014-NS-DC          Half size frame, S89D Brackets (4)
 CC-2014-TS-DC          Half size frame, S89D Brackets (4), top spool
 CC-2014-TB-DC          Half size frame, S89D Brackets (4), top & bottom spools

 CC-2025-NS-NB          Full size frame (10 bracket capacity)
 CC-2025-NS-DC          Full size frame, S89D Brackets (10)
 CC-2025-TS-DC          Full size frame, S89D Brackets (10), top spool
 CC-2025-TB-DC          Full size frame, S89D Brackets (10), top & bottom spools

 CC-2015-NS-NB          Half size frame (5 bracket capacity)
 CC-2015-NS-DC          Half size frame, S89D Brackets (5)
 CC-2015-TS-DC          Half size frame, S89D Brackets (5), top spool
 CC-2015-TB-DC          Half size frame, S89D Brackets (5), top & bottom spools
**Metal Housings**

Metal housings protect blocks and connections from damage when installed in “high risk” areas such as on a wall in a warehouse or factory. Our housings are manufactured from durable 18 gauge steel with a gray or beige finish. We provide two options — you can purchase housings with the blocks already assembled or just the housings to install your own blocks. These metal housing are not weatherproof and are recommended for indoor use only.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MH-25-49</td>
<td>Housing for one 6 X 50 B block or one 4 X 50 M block, gray</td>
</tr>
<tr>
<td></td>
<td>height: 442mm (17.40 in.), width: 137mm (5.40 in.), depth: 45.7mm (1.80 in.)</td>
</tr>
<tr>
<td>MH-50-49</td>
<td>Housing for two 6 X 50 B blocks or two 4 X 50 M blocks, gray</td>
</tr>
<tr>
<td></td>
<td>height: 442mm (17.40 in.), width: 229mm (9.03 in.), depth: 45.7mm (1.80 in.)</td>
</tr>
</tbody>
</table>

**Housing with Blocks**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S66M1-50MH-49</td>
<td>One S66M1-50 block in a MH-25 gray metal housing</td>
</tr>
<tr>
<td>S66M1-100MH-49</td>
<td>Two S66M1-50 blocks in a MH-50 gray metal housing</td>
</tr>
<tr>
<td>S66B4-25MH-49</td>
<td>One S66B4-25 block in a MH-25 gray metal housing</td>
</tr>
<tr>
<td>S66B4-50MH-49</td>
<td>Two S66B4-25 blocks in a MH-50 gray metal housing</td>
</tr>
<tr>
<td>S66B3-50MH-49</td>
<td>One S66B3-50 block in a MH-25 gray metal housing</td>
</tr>
<tr>
<td>S66B3-100MH-49</td>
<td>Two S66B3-50 blocks in a MH-50 gray metal housing</td>
</tr>
</tbody>
</table>

**Snap-on Covers**

These economical snap-on covers protect S66™ quick clips while providing a clear view of the wiring terminations. Made of flame-retardant plastic.

<table>
<thead>
<tr>
<th>Part #</th>
<th>For Use With</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC4</td>
<td>M4 X 50</td>
</tr>
<tr>
<td>BC612</td>
<td>B6 X 12</td>
</tr>
<tr>
<td>MC425</td>
<td>M4 X 25</td>
</tr>
<tr>
<td>BC6</td>
<td>B6 X 50</td>
</tr>
</tbody>
</table>

www.siemon.com
Lasting Hinge Covers

Use these lasting hinge covers and you’ll save up to 90% of the cost of a colored backboard system — and with colored covers, the planner or installer can color-code individual blocks instead of working in groups of four or eight.

Made from flame-retardant thermoplastic, the covers protect the quick clips and provide a convenient surface for marking circuit designations.

Each cover is hinged and can be easily removed and replaced. There are two depths for the covers; the standard-profile allows for standard plug-on accessories, and the high-profile cover allows for larger accessories such as the Colored Bridging Clips.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC425LH-(X)</td>
<td>Cover for M425-type block</td>
</tr>
<tr>
<td>Use (X) to specify color: 6 = blue, 9 = orange</td>
<td></td>
</tr>
<tr>
<td>MC4LH-(X)</td>
<td>Cover for M450-type block</td>
</tr>
<tr>
<td>Use (X) to specify color: 2 = white, 3 = red, 4 = gray, 5 = yellow, 6 = blue, 7 = green, 8 = violet, 9 = orange</td>
<td></td>
</tr>
<tr>
<td>MC4LH-HP-9</td>
<td>High-profile orange cover for M450-type block</td>
</tr>
</tbody>
</table>

Labels

These adhesive backed, lined labels allow technicians to write and maintain circuit information on the MC4 plastic snap-on cover.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC4-LBL-25</td>
<td>Label for MC4 cover, numbered 1-25</td>
</tr>
</tbody>
</table>

Designation Strips

Designation strips mount quickly and easily on the fanning strips of both M and B series S66 blocks. The strips provide a convenient labeling surface for circuit identification.

For M Blocks
D10-10. . . . . . . . . . . . . . . . . . . . White lined designation strip

For B Blocks
D13-10. . . . . . . . . . . . . . . . . . . . White lined designation strip
Bridging Clips

These industry standard bridging clips are used to connect adjacent quick clips on S66™ blocks. The clips are easy to remove for isolating and testing incoming pairs from outgoing pairs and are reusable. Available in either tin-plated grade A copper alloy (voice and data) or stainless steel (voice only).

Tin-plated Copper Alloy Clips
SA1-(XXXX), ............ 2-position clip

Stainless Steel Clips*
SA1-SS-(XXXX), ............ 2-position clip, stainless steel

Use (XXXX) to specify quantity: 100 = 100/bag, 1000 = 1000/bag

*Not recommended for use with data applications.

Colored Bridging Clips

Designed to fit the 66M type connecting block, each of these plug-on adapters contain two standard SA-1 bridging clips, so they actually bridge a complete pair when installed, not just a single wire. The plastic housings are color-coded and serve to protect the quick clip. Technicians can test lines with the clips in place by using our TPE in-line test probe.

SMBC-2-(X) ........................ Bridging clip
TPE ........................ Test probe/extractor

Use (X) to specify color: 2 = white, 3 = red, 5 = yellow, 6 = blue, 7 = green, 8 = violet

Special Service Markers

These red plastic markers slide over S66 quick clips and terminated wires and are ideal for marking special circuits on blocks.

Part #                   Description
S-857-916                2-position red marker

Capacity Expanding Adapters

These adapters create additional capacity on S66 blocks by plugging directly onto the S66 quick clips — with or without wires punched down. The adapters come with either one or two additional quick clips. Use a high-profile lasting hinge cover to fit over the adapters. The adapters are top and bottom stackable, but not side-by-side stackable. Not designed for use on category 5e S66M1-50 blocks.

SA2 ........................ Adapter with 1 double quick clip
SA2-1 ........................ Adapter with 2 single quick clips
SA3 ........................ Adapter with 1 single quick clip

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Organizer Rings

These plastic rings snap directly onto the side of an S89-type mounting bracket to organize, position, and retain cable and cross-connect wire. They also work well as a patch cord manager when used with our Modular Patch Blocks.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S606P</td>
<td>Organizer ring</td>
</tr>
</tbody>
</table>

Wire Distribution Spools

All of these high-impact plastic spools are used to neatly guide and retain cable or jumper wires. Cabling is held in place by the spool’s rim to allow easy access for changes or modifications. The S20A and S20B are white and can be used with either a main cross-connect frame or backboard. The S20C is black to match our CC frames and modular patch panels, and screws directly into the mounting holes of a standard 19 or 23 inch relay rack.

<table>
<thead>
<tr>
<th>S20A</th>
<th>White spool without screw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height:</td>
<td>42.7mm (1.68 in.)</td>
</tr>
<tr>
<td>Width:</td>
<td>42.7mm (1.68 in.)</td>
</tr>
<tr>
<td>Depth:</td>
<td>74.9mm (2.95 in.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S20B</th>
<th>White spool with captive (10) wood screw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height:</td>
<td>42.7mm (1.68 in.)</td>
</tr>
<tr>
<td>Width:</td>
<td>42.7mm (1.68 in.)</td>
</tr>
<tr>
<td>Depth:</td>
<td>74.9mm (2.95 in.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S20C</th>
<th>Black spool with captive (12-24) machine screw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height:</td>
<td>42.7mm (1.68 in.)</td>
</tr>
<tr>
<td>Width:</td>
<td>42.7mm (1.68 in.)</td>
</tr>
<tr>
<td>Depth:</td>
<td>74.9mm (2.95 in.)</td>
</tr>
</tbody>
</table>

Technical Tip!
We recommend a (10) wood screw for wall mount applications and a (12-24) machine screw for rack mount applications.

Tap® Adapters

The TAP is a flexible modular connecting adapter designed to access 66M connecting blocks. When installed, the TAP permits customer administration of moves and changes using modular cords, and provides test access. The TAP is designed in 1-, 2-, 3-, and 4-pair configurations and can be end-stacked (except TAP-2) or mounted side by side on a 66M block.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAP-2</td>
<td>1-pair, 6-position adapter, USOC</td>
</tr>
<tr>
<td>TAP-4</td>
<td>2-pair, 6-position adapter, USOC</td>
</tr>
<tr>
<td>TAP-6</td>
<td>3-pair, 6-position adapter, USOC</td>
</tr>
<tr>
<td>TAP-8</td>
<td>4-pair, 6-position adapter, T568B</td>
</tr>
</tbody>
</table>
Current Protection Module

Our CPM-2PLUS® prevents cable and equipment damage due to “sneak currents” (continuous foreign current levels exceeding 0.350 amperes). Sneak currents are not high enough to trigger overvoltage protectors but can pose fire hazards and cause damage to sensitive electronic equipment. They may be caused by direct or indirect contact with power lines, a low impedance connection to earth ground, or by a short circuit somewhere on the line.

Each Current Protection Module contains two fuses in a clear plastic carrier. They are installed across two adjacent pairs of 66 quick clips, establishing solid contact with the clips. When the module is activated, the fuse opens, cutting off the flow of excessive current, preventing fire risk and shock hazards on data and voice transmission lines.

The modules are side- and end-stackable, allowing up to 50-pair protection on a standard M1-100 block or 25-pair protection in a standard M1-50 block. Red plastic caps are available to designate priority circuits.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPM-2PLUS</td>
<td>Current protection module with two replaceable fuses</td>
</tr>
</tbody>
</table>
Siemon’s LightHouse® line of high-performance fiber optic cable and connectivity delivers a comprehensive solution set to meet nearly any network infrastructure need:

- A complete line of rapidly-deployed, high-density Plug and Play solutions supporting up to 40 and 100Gb/s speeds - Including the innovative LightStack™ ultra high-density Plug and Play system
- Comprehensive family of fiber enclosures, supporting up to 1152 fiber ports per enclosure
- High-performance, factory tested jumpers and pigtails including Siemon’s innovative push-pull LC BladePatch®
- Field-terminated connectivity — multiple LC, SC and ST configurations
- Preterminated and tested trunking cable assemblies available in custom lengths, fiber counts and configurations
- Fiber Cable — Multimode OM1 62.5/125, OM2, OM3 and OM4 50/125, and Singlemode OS1/OS2
- End-to-end line of fusion splice solutions

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**LightStack™**

Siemon’s Ultra High Density Fiber Plug & Play System

The Perfect Combination...

Siemon’s LightStack system combines superior performance and ultra high density with unmatched accessibility - all packaged in a sleek, modern enclosure that manages fiber cabling like never before.

LightStack was specifically designed for advanced data centers, network and storage area environments, while providing a seamless migration to 40 and 100 gigabit applications.

- **Ultra High Density**
  Elegantly designed enclosures facilitate up to 144 fibers (LC) and 864 fibers (MTP) within 1U or 576 (LC) and 3456 (MTP) fibers within 4U

- **Superior Jumper Management**
  Unlatch and swing open clips for complete access to any jumper with ample capacity to route all jumpers in one direction

- **Unmatched Accessibility**
  Divider is there when you need it and gone when you don’t. Slides inward for complete access to all connectivity at the rear of stacked enclosures

- **Low Loss Connectivity**
  Highest performing Plug and Play Modules and Adapters can be single-handedly installed and removed from the front or rear

To learn more about LightStack including its innovative labeling system and full range of preterminated trunks visit: www.siemon.com/lightstack

www.siemon.com
LightStack™ Enclosures

Siemon’s LightStack ultra high density fiber Plug and Play enclosure offers superior density, port access and cable management in a sleek, modern enclosure that easily supports today’s advanced data center and storage area network environments.

- **Cable Management Clips** — Unlatch and swing open for full access to any jumper
- **Innovative Labeling Solution** — Drop-down label strip holder for high visibility
- **Innovative Magnetic Door** — Opens and closes easily. Eliminates pinch points
- **Sliding Bottom Rear Divider** — Acts as a rear cable divider between stacked enclosures (in the out position). Pushes inward to provide complete access to connectivity at the rear of stacked enclosures
- **Module Insertion and Removal** — Can be quickly and easily installed or removed from the front or rear of the enclosure
- **Strain Relief** — Swivel tie down allows for simplistic approach for anchoring trunks and eliminating pinch points
- **Mounting Options** — Rack mounting brackets can be attached at any of 3 horizontal positions

**Ordering Information:**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS-1U-01</td>
<td>1U Enclosure, 144 LC fibers or 864 MTP fibers, mounts in 19 in. racks or cabinets</td>
</tr>
<tr>
<td>LS-4U-01</td>
<td>4U Enclosure, up to 576 LC fibers or 3456 MTP fibers, mounts in 19 in. racks or cabinets</td>
</tr>
</tbody>
</table>

www.siemon.com
**LightStack™ Modules**

LightStack LC-to-MTP Low Loss Plug and Play modules deliver a quick and efficient way to deploy high-performance fiber cabling in a low-profile, high density package. Up to 12 of these ultra-slim modules can be installed in a single 1U LightStack enclosure, seamlessly providing up to 144 easily-managed LC fiber ports. Available in OM4 Multimode and Singlemode configurations, these modules offer industry leading loss performance of just 0.35dB.

- **Ultra Slim Design** — LightStack modules have an ultra slim design to achieve maximum fiber density.
- **High Fiber Count** — Up to 12 fiber count per module.
- **Standard Interfaces** — LC to MTP interface. Available in OM4 and SM.
- **Low Loss Options** — Low loss performance (0.35dB per Multimode module).
- **Multiple Adapter Configurations** — Aqua LC and MTP adapters for OM4; Blue LC adapters and Black MTP adapters for SM.
- **Rear Module Handles** — Handles in the rear of module help facilitate removal from the back of the enclosure.

**Ordering Information:**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS-12-LCy-01</td>
<td>Module, 12 LC-to-MTP fibers, OM4, XGLO 550, Aqua LC and MTP adapters</td>
</tr>
<tr>
<td>LS-12-LCSM-01</td>
<td>Module, 12 LC-to-MTP fibers, Singlemode, Blue LC adapters, Black MTP adapters</td>
</tr>
</tbody>
</table>

**PERFORMANCE SPECIFICATIONS**

<table>
<thead>
<tr>
<th></th>
<th>Insertion Loss (dB)</th>
<th>Return Loss (dB)</th>
<th>Insertion Loss (dB)</th>
<th>Return Loss (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Multimode (850/1300nm)</td>
<td>Singlemode (1310/1550nm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTP</td>
<td>0.20</td>
<td>20</td>
<td>0.60</td>
<td>65</td>
</tr>
<tr>
<td>LC</td>
<td>0.15</td>
<td>30</td>
<td>0.40</td>
<td>60</td>
</tr>
<tr>
<td>MTP to LC</td>
<td>0.35</td>
<td>20</td>
<td>1.00</td>
<td>60</td>
</tr>
</tbody>
</table>

Reference Siemon’s White Paper titled: “The Need for Low-Loss Multifibre Connectivity in Today’s Data Center” for information and guidance on design options, channel models and distances for 10, 40, 100Gb Ethernet and Fibre Channel applications.

Insertion/Return loss testing is performed at 850nm/1300nm for MM and 1310/1550nm for SM.

www.siemon.com
LightStack™ Adapter Plates

Fully ready to support 40 and 100 gigabit applications, LightStack low-loss 0.2dB MTP pass-through adapters are available in 2, 4 and 6-port designs supporting up to 72 fibers per adapter and are offered in both aligned and opposed key orientation to accommodate all polarity methods. In addition, LightStack also offers industry exclusive 12-fiber LC pass-through adapter plates for current 10 gigabit Ethernet or Fibre Channel SAN applications.

LightStack MTP Adapter Plates
- Ultra slim design to achieve maximum fiber density
- Up to 72 fiber count
- Handles in the rear of module helps facilitate removal from the back of the enclosure

Ordering Information:

<table>
<thead>
<tr>
<th>MTP Port Count</th>
<th>Adapter Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 = 2 MTP Parts</td>
<td>AQ - Aqua**</td>
</tr>
<tr>
<td>4 = 4 MTP Parts</td>
<td>BK - Black**</td>
</tr>
<tr>
<td>6 = 6 MTP Parts</td>
<td>GR - Gray*</td>
</tr>
</tbody>
</table>

* Key Orientation B Only
** Key Orientation C Only

LightStack LC Adapter Plates
- Used in conjunction with LC BladePatch® RazorCore™ trunks for rear connections only
- Available in beige and aqua (MM) and blue (SM)
- 12 LC fibers

Ordering Information:

<table>
<thead>
<tr>
<th>Adapter Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQ = Aqua Multimode</td>
</tr>
<tr>
<td>BG = Beige Multimode</td>
</tr>
<tr>
<td>BL = Blue Singlemode</td>
</tr>
</tbody>
</table>
Rack Mount Interconnect Center (RIC3)

The RIC3 provides the best overall value for exceptional fiber management. The RIC3 enclosure offers superior fiber density without sacrificing fiber protection and accessibility. Features include a fully removable tray, improved labeling, standard front and rear door locks, and single-finger door latches. With superior cable management, port identification, fiber accessibility and security, the RIC3 is the best way to protect mission critical fiber connections.

**Rotating Grommets** — Patented rotating grommets facilitate loading and retention of jumpers and fiber while minimizing microbending stress when using the sliding tray

**Quick-Release Hinges** — Spring loaded quick-release hinges enable easy opening and removal of front and rear doors for complete access to fiber connections

**Enhanced Labeling** — Label virtually any port configuration with our hinged labels. The labels hang on the front door for improved visibility. When the door is opened, labels flip down allowing ready viewing of the label and corresponding ports

**Latching and Locking** — The RIC3 features a single-finger latch on both front and rear doors. Front and rear doors include a lock for added security.

**Quick-Pack® Adapter Plates** — Siemon Quick-Pack adapter plates can be inserted or removed with a single-finger latch for quick and easy access to fiber connections.

**Removable Tray** — The RIC3 cable management tray is fixed in place, but can be removed from the front or rear of the enclosure and moved to a work table for greater convenience.

**Maximum Capacity** — The RIC3 enables a maximum amount of fibers to be patched or patched and spliced in a 2, 3, and 4U enclosure without compromising accessibility. This allows more efficient utilization of rack space

**Superior Design** — Top and bottom access holes located at the rear of the enclosure allow fibers to be routed between tandem enclosures without having to run fibers outside of the enclosure

**Complete Access** — Management tray has a positive stop in both front and rear working positions providing complete access for moving, adding, changing, or cleaning of fiber connections

www.siemon.com
Rack Mount Interconnect Center (RIC3)

Siemon RIC3 enclosures are designed for enhanced fiber management and ease of use. They are compatible with an array of Siemon fiber Quick-Pack® and MTP adapter plates for your choice of fiber adapters and port density.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIC3-24-01</td>
<td>24- to 96-fiber (384 fibers with MTP adapter plates)</td>
<td>RIC3-36-01</td>
<td>36- to 144-fiber (up to 576 fibers with MTP adapter plates)</td>
</tr>
<tr>
<td></td>
<td>Rack Mount Interconnect Center, accepts (4) Quick-Pack adapter plates, 2U, black</td>
<td></td>
<td>Rack Mount Interconnect Center, accepts (6) Quick-Pack adapter plates, 2U, black</td>
</tr>
<tr>
<td></td>
<td>height: 86.6mm (3.4 in.) width: 432mm (17 in.)</td>
<td></td>
<td>height: 86.6mm (3.4 in.) width: 432mm (17 in.)</td>
</tr>
<tr>
<td></td>
<td>depth: 380mm (15 in.)</td>
<td></td>
<td>depth: 380mm (15 in.)</td>
</tr>
<tr>
<td>RIC3-48-01</td>
<td>48- to 192-fiber (up to 768 fibers with MTP adapter plates)</td>
<td>RIC3-72-01</td>
<td>72- to 388-fiber (up to 1152 fibers with MTP adapter plates)</td>
</tr>
<tr>
<td></td>
<td>Rack Mount Interconnect Center, accepts (8) Quick-Pack adapter plates, 3U, black</td>
<td></td>
<td>Rack Mount Interconnect Center, accepts (12) Quick-Pack adapter plates, 4U, black</td>
</tr>
<tr>
<td></td>
<td>height: 133mm (5.23 in.) width: 432mm (17 in.)</td>
<td></td>
<td>height: 178mm (7 in.) width: 432mm (17 in.)</td>
</tr>
<tr>
<td></td>
<td>depth: 380mm (15 in.)</td>
<td></td>
<td>depth: 380mm (15 in.)</td>
</tr>
</tbody>
</table>

Note: 1U = 44.5mm
Note: All RIC products include laser-printable labels*, cable ties, rack-mounting hardware, and pre-installed fiber management clips.
*Visit www.siemon.com for labeling software.

**MAXIMUM RIC3 FIBER CAPACITY**

<table>
<thead>
<tr>
<th># Fibers per Quick-Pack</th>
<th>Adapter Options</th>
<th>RIC24</th>
<th>RIC36</th>
<th>RIC48</th>
<th>RIC72</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>ST, SC</td>
<td>24</td>
<td>36</td>
<td>48</td>
<td>72</td>
</tr>
<tr>
<td>8</td>
<td>ST, SC</td>
<td>32</td>
<td>48</td>
<td>64</td>
<td>96</td>
</tr>
<tr>
<td>12</td>
<td>ST, SC, LC</td>
<td>48</td>
<td>72</td>
<td>96</td>
<td>144</td>
</tr>
<tr>
<td>16</td>
<td>LC</td>
<td>64</td>
<td>96</td>
<td>128</td>
<td>192</td>
</tr>
<tr>
<td>24</td>
<td>LC</td>
<td>96</td>
<td>144</td>
<td>192</td>
<td>288</td>
</tr>
<tr>
<td>96</td>
<td>MTP</td>
<td>384</td>
<td>567</td>
<td>768</td>
<td>1152</td>
</tr>
</tbody>
</table>

**MAXIMUM SPICING CAPACITY**

<table>
<thead>
<tr>
<th>Splice Type</th>
<th>RIC24</th>
<th>RIC36</th>
<th>RIC48</th>
<th>RIC72</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fusion</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>144</td>
</tr>
</tbody>
</table>
**Wall Mount Interconnect Center (SWIC3)**

The Wall Mount Interconnect Center (SWIC3) is a cost-effective fiber enclosure designed to manage and protect up to 192 fibers using SC, ST or LC adapter plates and up to 768 with MTP adapter plates. The low-profile, compact design makes it ideal for telecommunications rooms or other installation areas where wall space is a premium. The adapter mounting method is based on Siemon’s Quick-Pack® adapter plates also used in our family of Rack Mount Interconnect Centers (RIC3).

**Door Options** — Doors on enclosure and jumper guard can be ordered with independent key lock or latching options

**Fiber Jumper Guard** — Integrated hinged fiber guard provides independent protection and management for fiber jumpers

**Convenient Labeling** — Convenient labeling system includes removable clear label holders for storing and protecting fiber documentation on each door

**Available with Quick-Pack Adapter Plates** — Quick-Pack adapter plates are available with SC, ST, LC or MTP adapters

**Accessories** — Dust-proofing grommets included

**Optional Splice Tray Bracket** — Optional bracket available for mounting multiple splice trays (not shown)

**Patented rotating grommets** — Facilitate loading and retention of jumpers for extended SWIC only (SWIC3G-E)

**Easy Access**
Doors on enclosures and jumper guard swing open a full 180° to provide complete front and side access.

**Dual-Level Fiber Managers**
Incorporates two independent levels of storage to enable the fiber to be routed at levels that correspond to the adapters.

**Snap-In Adapter Plates**
Utilizes same Quick-Pack adapter plates as RIC3 enclosures with integrated latches for snap-in installation and single-finger removal.

www.siemon.com
Ordering Information:

Part # Description
SWIC3-M-01*.................Mini Wall Mount Interconnect Center, black, accepts 2 Quick-Pack® adapter plates
height: 218.4mm (8.6 in.)
width: 185.4mm (7.3 in.)
deepth: 82.6mm (3.25 in.)
Use (X) to specify type of latch door: A = key lock, C = thumb-turn latch
*Does not accept splice trays

SWIC3-(X)-01.................Wall Mount Interconnect Center, black. Includes dual-level fiber managers, port
designation labels and removable pocket, dust-proofing grommets, strain relief hardware, cable ties, and mounting
hardware, accepts 4 Quick-Pack adapter plates
height: 311mm (12.25 in.)
width: 311mm (12.25 in.)
deepth: 82.6mm (3.25 in.)

SWIC3G-(X)(X)-01 ..............Wall Mount Interconnect Center with integrated jumper guard, black. Includes dual-level
fiber managers, port designation labels and removable pocket, stick-on port designation
labels for guard, dust-proofing grommets, strain relief hardware, cable ties, and mounting
hardware, accepts 8 Quick-Pack adapter plates
(XX) = Color: 01 = Black, 80 = Ivory
height: 355mm (14.0 in.)
width: 595mm (23.5 in.)
deepth: 165mm (6.5 in.)
Use 1st (X) to specify type of lock on the enclosure (left) door:
A = key lock, C = thumb-turn latch
Use 2nd (X) to specify type of lock on the guard (right) door:
A = key lock, C = thumb-turn latch

Accessories

Fiber Splice Tray Brackets
Part # Description
TRAY-B-01 ..................Bracket for mounting splice trays to SWIC3 base
TRAY-EB-01 ..................Bracket for mounting splice trays to SWIC3G-E base

Fiber Splice Trays
Part # Description
TRAYM-3 ..................Mini splice tray for up to 12 fusion splices
with sleeve protection

Fiber Adapter Bracket
Part # Description
SWIC3G-E-BRKT ..............Bracket holds up to 4 FSC series
Siemon fiber splitter cassettes

MAXIMUM SWIC3 FIBER CAPACITY

<table>
<thead>
<tr>
<th># Fibers per Quick-Pack</th>
<th>Adapter Options</th>
<th>SWIC3-M</th>
<th>SWIC3</th>
<th>SWIC3G-E</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>ST, SC</td>
<td>12</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>8</td>
<td>ST, SC</td>
<td>16</td>
<td>32</td>
<td>64</td>
</tr>
<tr>
<td>12</td>
<td>ST, SC</td>
<td>24</td>
<td>48</td>
<td>96</td>
</tr>
<tr>
<td>16</td>
<td>LC</td>
<td>32</td>
<td>64</td>
<td>128</td>
</tr>
<tr>
<td>24</td>
<td>LC</td>
<td>48</td>
<td>96</td>
<td>192</td>
</tr>
<tr>
<td>96</td>
<td>MTP</td>
<td>192</td>
<td>384</td>
<td>768</td>
</tr>
</tbody>
</table>

MAXIMUM SPLICING CAPACITY

<table>
<thead>
<tr>
<th>Splice Type</th>
<th>SWIC3</th>
<th>SWIC3G-E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fusion</td>
<td>48</td>
<td>96</td>
</tr>
</tbody>
</table>

MAXIMUM SWIC3G-E FIBER SPLITTER CAPACITY

<table>
<thead>
<tr>
<th>Type/Ratio</th>
<th># Cassettes</th>
<th>Output</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td># Cassettes</td>
<td>RIC-F-SC(X)(X)8-01</td>
<td># Ports</td>
</tr>
<tr>
<td>1x8</td>
<td>4</td>
<td>32</td>
<td>4</td>
</tr>
<tr>
<td>1x16</td>
<td>4</td>
<td>8</td>
<td>64</td>
</tr>
<tr>
<td>Dual 1x16</td>
<td>3</td>
<td>6</td>
<td>48</td>
</tr>
<tr>
<td>1x32</td>
<td>2</td>
<td>8</td>
<td>64</td>
</tr>
<tr>
<td>LC</td>
<td># Cassettes</td>
<td>RIC-F-LC(X)(X)16-01</td>
<td># Ports</td>
</tr>
<tr>
<td>1x8</td>
<td>4</td>
<td>2</td>
<td>32</td>
</tr>
<tr>
<td>1x16</td>
<td>4</td>
<td>4</td>
<td>64</td>
</tr>
<tr>
<td>Dual 1x16</td>
<td>3</td>
<td>3</td>
<td>48</td>
</tr>
<tr>
<td>1x32</td>
<td>8</td>
<td>128</td>
<td>4</td>
</tr>
<tr>
<td>MTP</td>
<td># Cassettes</td>
<td>RIC-F-MP48-01</td>
<td># Ports</td>
</tr>
<tr>
<td>1x32</td>
<td>4</td>
<td>4</td>
<td>128</td>
</tr>
</tbody>
</table>

www.siemon.com
Fiber Connect Panel (FCP3)

Siemon’s popular Fiber Connect Panels (FCP3-DWR and FCP3-RACK) economically connect, protect, and manage up to 72 fibers in 1U (up to 288 fibers with MTP to MTP adapters). It accepts Siemon’s Quick-Pack® adapter plates with patented single-finger access. The FCP3-DWR makes access to the connections easy via a fixed tray that can be released and slid out of the front or rear of the enclosure.

### Maximum FCP3 Fiber Capacity

<table>
<thead>
<tr>
<th># Fibers per Quick-Pack</th>
<th>Adapter Options</th>
<th>FCP3</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>ST, SC</td>
<td>18</td>
</tr>
<tr>
<td>8</td>
<td>ST, SC</td>
<td>24</td>
</tr>
<tr>
<td>12</td>
<td>ST, SC, LC</td>
<td>36</td>
</tr>
<tr>
<td>16</td>
<td>LC</td>
<td>48</td>
</tr>
<tr>
<td>24</td>
<td>LC</td>
<td>72</td>
</tr>
<tr>
<td>96</td>
<td>MTP</td>
<td>288</td>
</tr>
</tbody>
</table>

### Maximum Splicing Capacity

<table>
<thead>
<tr>
<th>Splice Type</th>
<th>FCP3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fusion</td>
<td>72</td>
</tr>
</tbody>
</table>

High Density

FCP3 enclosures accommodate up to 72 fibers (288 with MTP adapter plates) in only 1U on a 19 inch rack.

Sliding Tray

The FCP3-DWR (drawer version) features a tray that slides out from the front or rear, providing easy access to fiber connections. The entire tray can be removed and placed on a work table for more convenience.
Fiber Connect Panel (FCP3)

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCP3-DWR</td>
<td>6- to 72-fiber (up to 288 fibers with MTP adapter plates) Fiber Connect Panel with sliding tray, accepts (3) Quick-Pack® adapter plates, 1U, black. Includes mounting brackets, housing/tray, fiber managers, grommets, label holders, and labels. height: 43.2mm (1.7 in.) width: 482.6mm (19 in.) depth: 356.8mm (14 in.)</td>
</tr>
<tr>
<td>FCP3-RACK</td>
<td>6- to 72-fiber (up to 288 fibers with MTP adapter plates) Fiber Connect Panel with fixed tray, accepts (3) Quick-Pack adapter plates, 1U, black. Includes mounting brackets, housing/cover, fiber managers and grommet. height: 43.2mm (1.7 in.) width: 482.6mm (19 in.) depth: 241.3mm (9.5 in.)</td>
</tr>
</tbody>
</table>

Note: 1U = 44.5 mm (1.75 in.)

Compression Fittings

Compression fittings are utilized as an enhanced method for securing cables to FCP3 fiber enclosures. Acme threads on the body prevent skipping, allowing for faster installations of lock-nuts.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF-(XX)</td>
<td>Compression fitting</td>
</tr>
</tbody>
</table>

Use (XX) to specify fiber diameter:
- 40 = 5.8 – 13.9mm (0.2 in.)
- 51 = 11.4 – 18.0mm (0.7 in.)
- 60 = 15.0 - 25.4mm (1 in.)

Splice Trays (XGLO® and LightSystem®)

These aluminium trays come with a clear, snap-on polycarbonate cover and can be stacked for high-density applications. The standard tray holds up to 24 splices. The mini-tray for use with the SWIC3, accommodates up to 12 splices.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAY-3</td>
<td>Standard splice tray for up to 24 fusion splices with sleeve protection. For use with RIC3 and FCP3 fiber enclosures.</td>
</tr>
<tr>
<td>TRAY-M-3</td>
<td>Mini splice tray for up to 12 fusion splices with sleeve protection.</td>
</tr>
</tbody>
</table>

Standard Tray Dimensions
- height: 103mm (4 in.)
- width: 298mm (11.7 in.)
- depth: 8.13mm (0.32 in.)

Mini Tray Dimensions
- height: 103mm (4 in.)
- width: 179mm (7.04 in.)
- depth: 8.13mm (0.32 in.)
Heat Shrink Sleeves

Heat shrink sleeves provide a safe and efficient method for protecting fusion splices on either 250 or 900 micron coated fibers. Heat shrink sleeves are threaded on to fibers prior to fusion splicing and then positioned directly over splice and heated via an oven or heat gun.*

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HT-40</td>
<td>40mm (1.57 in.) heat shrink sleeve</td>
</tr>
<tr>
<td>HT-60</td>
<td>60mm (2.36 in.) heat shrink sleeve</td>
</tr>
</tbody>
</table>

*Heating times may vary depending on heat source.

Quick-Pack® Adapter Plates

Siemon's patented Quick-Pack adapter plates feature an integrated latch, which provides single-finger access to fiber even in fully populated enclosures.

XGLO® & LightSystem®

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIC-F-SC6-01</td>
<td>3 duplex SC adapters (6 fibers)</td>
</tr>
<tr>
<td>RIC-F-SC6-01</td>
<td>3 duplex SC adapters (6 fibers), aqua adapters (not shown)</td>
</tr>
<tr>
<td>RIC-F-SC8-01</td>
<td>4 duplex SC adapters (8 fibers)</td>
</tr>
<tr>
<td>RIC-F-SC8-01</td>
<td>4 duplex SC adapters (8 fibers), aqua adapters (not shown)</td>
</tr>
<tr>
<td>RIC-F-S8Q-01</td>
<td>4 duplex SC adapters (8 fibers), aqua adapters (not shown)</td>
</tr>
<tr>
<td>RIC-F-SC12-01</td>
<td>6 duplex SC adapters (12 fibers)</td>
</tr>
<tr>
<td>RIC-F-SC12-01</td>
<td>6 duplex SC adapters (12 fibers), aqua adapters (not shown)</td>
</tr>
<tr>
<td>RIC-F-SC12Q-01</td>
<td>6 duplex SC adapters (12 fibers), aqua adapters (not shown)</td>
</tr>
</tbody>
</table>

LightSystem®

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIC-F-SA6-01</td>
<td>3 duplex ST adapters (6 fibers)</td>
</tr>
<tr>
<td>RIC-F-SA8-01</td>
<td>4 duplex ST adapters (8 fibers)</td>
</tr>
<tr>
<td>RIC-F-SA12-01</td>
<td>6 duplex ST adapters (12 fibers)</td>
</tr>
<tr>
<td>RIC-F-SA12-01</td>
<td>Only recommended for push-pull ST connectors due to limited access</td>
</tr>
<tr>
<td>RIC-F-BLNK-01</td>
<td>Blank adapter plate</td>
</tr>
</tbody>
</table>

Each adapter plate with icon pockets includes red, blue, black, and clear icons with paper labels. All SC and ST adapters are “universal” to support Multimode and Singlemode.

Fiber Management Tray (FMT)

The Siemon Fiber Management Tray (FMT) is an economical solution for managing fiber cable slack and splice trays. The management tray has been designed to easily retrofit any standard 1 RMS CT® or MAX® Series Patch Panel and can organize up to 32 fibers. The tray is only 254mm (10 in.) deep, allowing it to readily fit into cabinet enclosures. Each enclosure can accept up to two fiber splice trays.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>RMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT-FMT-16</td>
<td>Fiber tray for 1 RMS CT or MAX Panel</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: 1 RMS = 44.5mm (1.75 in.)
Siemon Plug and Play Modules

Siemon LC to MTP® and SC to MTP Plug and Play modules provide a quick and efficient way to deploy up to 24 LC or 12 SC fibers in a single module. These factory terminated and tested ports are protected within the housing for reliable high performance and simply connected via 12-strand MTP ports. Modules are available in Multimode (62.5/125, standard 50/125 and XGLO® laser optimized 50/125 OM3/OM4) and Singlemode cable.

**Compact Housing** — Reduces mounting depth for greater cable management space within enclosures

**Optimized Adapter Spacing** — Enables easy finger access to fiber jumper connector latches in high density patching environments

**Durable and Lightweight** — High-impact molded plastic body with single-finger access

**Multimode and Singlemode Modules** — Utilize zirconia ceramic sleeves for optimum performance

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**MTP to MTP Adapter Plates**

Siemon MTP Adapter Plates offer a user friendly “pass-through” option for MTP connectors. Fitting within Siemon's fiber enclosures and VersaPOD vertical patch panels, these plates secure MTP connectors, allowing efficient implementation of MTP to MTP reels and extenders as well as MTP to LC Trunks for direct equipment and patching connections.

**High Density**
Supports up to 96 fibers per adapter plate - providing up to 1152 fibers in 4U

**Flexible Configurations**
1, 2, 4, 6 and 8 port versions available, supporting both Singlemode and Multimode

**40 Gb/s and 100 Gb/s Ready**
Enables simple upgrade path to future 40 Gb/s and 100 Gb/s applications over Multimode 50/125 laser optimized fiber

**Popular RIC Adapter Footprint**
Fits within RIC, FCP and SWIC Siemon fiber enclosures and VersaPOD® vertical patch panels
Siemon’s Copper/Fiber Combo Panel provides users with exceptional versatility and robustness. The Combo Panel allows copper outlets to be mixed in the same rack mount space as fiber plug and play modules. The compact 1U design offers integrated cable management features and supports Category 5e to 7A and all Multimode and Singlemode fiber applications.

**Copper/Fiber Combo Panel**

### Features:

- **ANSI/EIA 310-E Compliant** — Panels can be mounted directly on standard 19 inch rack or cabinet.
- **Plug & Play** — Panel accepts up to 4 Plug & Play Modules or adapter plates.
- **Copper Adapter Plate** — Accepts 6 copper outlets with port identification on adapter plate.
- **Installer Friendly** — Individual UTP or shielded copper adapter plates easily snap into place, providing integral grounding without additional steps.
- **Cable Management** — Built in cable manager provides ability to secures cables for proper strain relief.
- **Convenient Labeling** — Panel labeling area provided allows unique panel identifiers to be added.
- **Aesthetics** — Lightweight high strength steel with black finish.
- **Installer Friendly** — Panels feature an integrated grounding strip to ensure proper ground path from copper outlets to grounding point.

### Ordering Information:

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPM-SPNL4-01</td>
<td>PNL, high density, shielded copper/fiber combo, 1U, black</td>
</tr>
<tr>
<td>PPM-SMX6-01</td>
<td>Copper Adapter Plate, 6-port, black</td>
</tr>
</tbody>
</table>

Panels include tie-wraps, grounding kit, and mounting screws.

www.siemon.com
High Density 1U Fiber Connect Panel System

High-Density FCP3 Fiber Connect Panel

Economically connect, protect and manage up to 96 fibers within 1 rack mount space. Designed to integrate with high-density FCP3 fiber Plug and Play modules.

High Density
Supports up to 96 fibers in just 1U

Enhanced Accessibility
Fiber drawer slides to the front and rear for maximum access to fiber connections

Bend Radius Management
Recessed modules provide a high-capacity jumper management zone that helps maintain proper fiber bend radius

Part # Description
FCP3-DWR-4 .................. High-density FCP3 Fiber Enclosure, black
PPM-BLNK ..................... High-density FCP3 Blank Panel Filler, black

High-Density Combo Panel FCP3 Plug and Play Modules and Adapter Plates

Siemon LC to MTP® FCP3 Plug and Play modules and LC adapter plates are designed for simple, snap-in deployment within the high density FCP3 fiber connect panel. Providing 24 LC fibers per module, the factory terminated and tested modules are available in OM3 and OM4 Multimode and Singlemode configurations. The LC adapter plates provide a simple way to integrate traditional LC to LC connectivity within the ultra-high density FCP3 enclosure.

High Density
Modules provide 24 LC fibers per module, supporting up to 96 ports within the 1U FCP3 fiber connect panel

Fast Deployment
Snap-in mounting and multi-fiber MTP connectivity offers ultra-fast deployment of high-performance fiber channels

Compact Housing
Reduces mounting depth for greater cable management space within enclosures

Optimized Adapter Spacing
Enables easy finger access to fiber jumper connector latches in high density patching environments

Multimode and Singlemode Modules
Utilizes zirconia ceramic sleeves for optimum performance

Ordering Information:

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Fiber Type</th>
<th>Adapter Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 = 12 Fiber</td>
<td>6 = OM1, 62.5/125 Multimode beige LC adapters</td>
<td>Blank = Beige MM</td>
</tr>
<tr>
<td>24 = 24 Fiber</td>
<td>S = OM2, 50/125 Multimode beige LC adapters</td>
<td>Q = Aqua MM</td>
</tr>
<tr>
<td></td>
<td>SL = OM3, XGLO 500 50/125 Multimode aqua adapters</td>
<td>U = Blue SM</td>
</tr>
<tr>
<td></td>
<td>SV = OM4, XGLO 500 50/125 Multimode aqua adapters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SM = OS1/OS2, Singlemode blue LC adapters</td>
<td></td>
</tr>
</tbody>
</table>

PPM-(XX)-LC(XX)-01 ............ High-density LC to MTP Module, black
PPM-F-LC(XX)-01 ............. High-density FCP3 LC Adapter plates

PPM-(XX)-LC(XX)-01 ............ High-density LC to MTP Module, beige LC adapters
PPM-F-LC(XX)-01 ............. High-density FCP3 LC Adapter plates

www.siemon.com
Plug and Play Cable Assemblies

MTP® to MTP Reels and Extenders

Combining Siemon’s reduced-diameter RazorCore™ cable with 12-fiber MTP connectors, Plug and Play Reels are designed to be quickly pulled and connected to Siemon Plug and Play Modules and MTP Adapter Plates. Custom configurable to precise application requirements, these reels efficiently put high-performance, high-density fiber connections exactly where you need them. Extenders offer Male MTP Connectors on one end and female MTP adapters on the other to allow field extension of MTP Reels.

Reduced Pathway Fill — Siemon’s RazorCore cable has significantly reduced cable O.D. resulting in less cable tray fill and pathway restrictions

Ordering Information: Non-Armored

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Fiber Count</th>
<th>Fiber Connectors</th>
<th>Length Unit</th>
<th>Configuration</th>
<th>Polarity Method (per TIA-568-C.3)</th>
<th>Jacket Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 – 12</td>
<td>12 Fiber MTP</td>
<td>Ft.</td>
<td>R = Standard Loss</td>
<td>A = Method A</td>
<td>R = Riser</td>
</tr>
<tr>
<td></td>
<td>24 – 24</td>
<td></td>
<td>Ft.</td>
<td>L = Low Loss</td>
<td>B = Method B</td>
<td>P = Plenum</td>
</tr>
<tr>
<td></td>
<td>36 – 36</td>
<td></td>
<td>Ft.</td>
<td>E* = Standard Loss Extender</td>
<td>C = Method C</td>
<td>L = LSOH</td>
</tr>
<tr>
<td></td>
<td>48 – 48</td>
<td></td>
<td>Ft.</td>
<td></td>
<td>Blank = Fiber Extender (FE and FB)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>72 – 72</td>
<td></td>
<td>Ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>96 – 96</td>
<td></td>
<td>Ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>144 – 144</td>
<td></td>
<td>Ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See performance details on page 6.18.

* Fiber Extenders ship with MTP Adapter for quick transition.

** Order length is measured connector tip to connector tip. Multi-leg versions offered with standard 1 meter (3.28 ft.) legs. Minimum order length is 1 meter (3.28 ft.) for 12 strand and 3 meters (9.8 ft.) for 24 strands or greater (See diagram at right)

Ordering Information: Armored

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Fiber Count</th>
<th>Fiber Connectors</th>
<th>Length Unit</th>
<th>Configuration</th>
<th>Polarity Method (per TIA-568-C.3)</th>
<th>Jacket Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 – 12</td>
<td>12 Fiber MTP</td>
<td>Ft.</td>
<td>R = Standard Loss</td>
<td>A = Method A</td>
<td>AR = Armored Riser</td>
</tr>
<tr>
<td></td>
<td>24 – 24</td>
<td></td>
<td>Ft.</td>
<td>L = Low Loss</td>
<td>B = Method B</td>
<td>AP = Armored Plenum</td>
</tr>
<tr>
<td></td>
<td>36 – 36</td>
<td></td>
<td>Ft.</td>
<td></td>
<td>C = Method C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>48 – 48</td>
<td></td>
<td>Ft.</td>
<td></td>
<td>Blank = Fiber Extender (FE and FB)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>72 – 72</td>
<td></td>
<td>Ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>96 – 96</td>
<td></td>
<td>Ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>144 – 144</td>
<td></td>
<td>Ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: LSOH versions available. Contact Customer Service for details.

www.siemon.com
Plug and Play MTP® to LC Trunks

Utilizing high quality Siemon RazorCore™ cable, MTP to LC Trunks offer a connectivity transition from 12-fiber MTP connectors to duplex LC connectors. These may be implemented using Siemon’s MTP to MTP Adapter Plates to provide direct MTP to LC patching options over a wide range of distances and infrastructure configurations.

Ordering Information:

**Configuration**
- **B** = Low Loss (OM2/OM3 only)
- **F** = Standard Loss

**Fiber Count**
- **B** = 12
- **C** = 24
- **E** = 36
- **F** = 48
- **G** = 72
- **H** = 96
- **J** = 144

**Pulling Eye**
- **A** = Side A
- **B** = Side B
- **C** = None

**Fiber Type**
- **6** = OM1, 62.5/125 Multimode
- **S** = OM2, 50/125 Multimode
- **SL** = OM3, XGLO 50/125 Multimode
- **SM** = OM4, XGLO 50/125 Multimode
- **5V** = OS1, OS2, Singlemode

**Jacket Rating**
- **R** = Riser
- **P** = Plenum
- **L** = LSZH

**MTP Connector Gender**
- **MM** = Male
- **MF** = Female

**Length**
- **F** = Feet
- **M** = Meters

**Length Unit**
- Length must be 3 digits
- Example: 003 = 3 m
- 010 = 10 ft.

**Configuration**
- **L** = Low Loss (OM3/OM4 only)
- **F** = Standard Loss

**Length**
- 6 = OM1, 62.5/125 Multimode
- 5 = OM2, 50/125 Multimode
- 5L = OM3, XGLO 300 50/125 Multimode
- 5V = OM4, XGLO 550 50/125 Multimode
- SM = OS1/OS2, Singlemode

Length must be 3 digits
- Example: 003 = 3 m
- 010 = 10 ft.

See performance details on page 6.18.

* Minimum order length is 1 meter (3.28 ft.)
* Order length is measured connector tip to connector tip.
* Trunks greater than 1 meter (3.28 ft.) have breakout length of 1 meter (3.28 ft.)
* 1 meter (3.28 ft.) trunks have a 50cm (1.64 ft.) breakout length

(See diagram below)
Next Generation MTP Trunks

Siemon’s Next Generation MTP to MTP trunks are designed to achieve 45kgf (100 lbf.) pull strength to handle more aggressive pathway environments. They come with a foamed zipper pulling eye for quick removal saving on installation time and are reusable if relocation of a trunk is required after the initial installation. They are available in 12/24 fiber counts and Low Loss options only.

- OM3/OM4 Bend Insensitive Fiber (BIF)
- SM Non-Bend Insensitive Fiber
- 12 and 24 Fiber strand counts
- Polarity methods A, B and C options
- Low Loss performance (0.20dB for Multimode MTP and 0.60dB for Singlemode MTP)
- Integrated breakout and zipper pulling eye work together to achieve 45kg (100 lbf.) tensile pull strength
- Zipper pulling eye allows for quicker installs
  - Allows pulling eyes to be reused when relocating trunks during MAC work

Ordering Information:

<table>
<thead>
<tr>
<th>Strand Count</th>
<th>Fiber Type</th>
<th>Cable Type</th>
<th>Polarity Method</th>
<th>Length Unit</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>B = 12</td>
<td>L = OM3, XGLO 300, 50/G125 Multimode</td>
<td>P = Plenum</td>
<td>A = Method A</td>
<td>F = Feet</td>
<td>003 = 3m</td>
</tr>
<tr>
<td>C = 24</td>
<td>V = OM4, XGLO 500, 50/G125 Multimode</td>
<td>R = Riser</td>
<td>B = Method B</td>
<td>M = Meters</td>
<td>010 = 10 ft.</td>
</tr>
<tr>
<td></td>
<td>A = OS1/OS2, Singlemode</td>
<td>L = LSOH</td>
<td>C = Method C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LC BladePatch® to MTP Hybrid Trunks

- LC BladePatch with push pull latch further improves accessibility
- Designed to facilitate an interconnect or cross connect point between active equipment
- OM3/OM4 Bend Insensitive Fiber (BIF)
- SM Non-Bend Insensitive Fiber
- 12 Fiber strand count
- Specific staggered lengths to active equipment
  - Nexus, Cisco MDS, Brocade and No stagger
- Low Loss performance 0.15 dB for LC and 0.20 dB for Multimode MTP
- Standard Loss performance 0.25 dB for LC and 0.60 dB for Singlemode MTP
- Integrated cable manager on breakout

Ordering Information:

<table>
<thead>
<tr>
<th>Pulling Eye Option</th>
<th>Fiber Type</th>
<th>Jacket Rating</th>
<th>Length Unit</th>
<th>Stagger Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = MTP Side</td>
<td>L = OM3, XGLO 300, 50/G125 Multimode</td>
<td>P = Plenum</td>
<td>F = Feet</td>
<td>1 = No Stagger</td>
</tr>
<tr>
<td></td>
<td>V = OM4, XGLO 500, 50/G125 Multimode</td>
<td>R = Riser</td>
<td>M = Meter</td>
<td>2 = Cisco 9512 &amp; 9412</td>
</tr>
<tr>
<td></td>
<td>A = OS1/OS2, Singlemode</td>
<td>L = LSOH</td>
<td>L = MTP Male</td>
<td>3 = Cisco N905S</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>F = MTP Female</td>
<td>4 = Brocade</td>
</tr>
</tbody>
</table>

www.siemon.com
Plug and Play Fiber System Optical Performance

STANDARD MODULES AND ASSEMBLIES

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>MAX Insertion (dB)</th>
<th>MAX Return Loss (dB)</th>
<th>Performance Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTP</td>
<td>LC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5L-MM</td>
<td>0.4</td>
<td>20</td>
<td>XGLO 300</td>
</tr>
<tr>
<td>5V-MM</td>
<td>0.4</td>
<td>20</td>
<td>XGLO 550</td>
</tr>
<tr>
<td>SM-LWP</td>
<td>0.6</td>
<td>55</td>
<td>XGLO</td>
</tr>
</tbody>
</table>

LOW LOSS MODULES AND ASSEMBLIES

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>MAX Insertion (dB)</th>
<th>MAX Return Loss (dB)</th>
<th>Performance Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTP</td>
<td>LC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5L-MM</td>
<td>0.20</td>
<td>20</td>
<td>XGLO 300</td>
</tr>
<tr>
<td>5V-MM</td>
<td>0.20</td>
<td>20</td>
<td>XGLO 550</td>
</tr>
</tbody>
</table>

Insertion/Return loss testing is performed at 850nm/1300nm for MM and 1310/1550nm for SM

Fiber Cleaning Tools

Simple to use and highly effective at removing contaminants that can degrade the optical performance of critical fiber connections, these dry cloth cleaning tools are specially designed to clean multi-fiber MTP® connectors as well as LC and SC fiber connectors. The MTP version cleans both male MTP connectors in Plug and Play modules and female connectors in adapter plates. LC and SC versions clean installed connectors as well as unmated connectors via an innovative dustcap/adapter.

Ordering Information:

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP-CTMP</td>
<td>MTP multi-fiber connector cleaning tool</td>
</tr>
<tr>
<td>PP-CTL</td>
<td>LC simplex fiber connector cleaning tool</td>
</tr>
<tr>
<td>PP-CTSC</td>
<td>SC simplex fiber connector cleaning tool</td>
</tr>
</tbody>
</table>

www.siemon.com
LC BladePatch®

Siemon’s LC BladePatch duplex jumper offers a unique solution for high-density fiber optic patching environments. It features a revolutionary and innovative push-pull boot design to control the latch, enabling easy access and removal in tight-fitting areas. The LC BladePatch utilizes a smaller diameter uni-tube cable design which reduces cable pathway congestion improving air flow and increasing energy efficiency while simplifying overall cable management. The LC BladePatch provides low-loss performance for Multimode and Singlemode supporting the precise optical performance requirements for high speed networks and improving network performance. The LC BladePatch is ideal for patching high density blade servers, patch panels and equipment.

- Innovative, patent-pending push-pull boot design to control the latch.
  - Enhances installation and removal access in high density patching environments
- Low profile boot design optimizes side-stackability
- Designed specifically for high density data center applications and high density blade servers
- Smaller diameter uni-tube duplex cable design
  - Reduces cable pathway congestion
  - Improves airflow and energy efficiency
  - Simplifies cable management
  - OFNR, OFNP, LSOH
- Patent-pending rotating latch design for easy polarity change
  - Latch-only rotation to eliminate potential connector and fiber damage
  - Clear identification if a polarity change has been made
- The push-pull design enables easy access and removal via the boot in tight-fitting areas
- Low profile boot design optimizes side-stackability
- OM3 and OM4 50/125 Multimode and OS1/OS2 Singlemode (UPC)
- Fits within any standard LC adapter opening or LC SFP module (not compatible with internally shuttered LC adapters)
- Rotating latch design eliminates potential fiber damage during polarity changes
Product Information

PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Wavelength (nm)</th>
<th>OM3 50/125µm Multimode</th>
<th>OM4 50/125µm Multimode</th>
<th>OS1/OS2 Singlemode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fiber 1</td>
<td>Fiber 2</td>
<td>OM3 50/125µm Multimode</td>
</tr>
<tr>
<td>850</td>
<td>850*</td>
<td>850*</td>
<td>1310/1550nm</td>
</tr>
<tr>
<td>1300</td>
<td>1300</td>
<td>1300</td>
<td></td>
</tr>
<tr>
<td>Min. Cable Bandwidth (MHz·km)</td>
<td>1500 (OFL)</td>
<td>500 (OFL)</td>
<td>2000 (EMB)</td>
</tr>
<tr>
<td>Max. Insertion Loss (dB)</td>
<td>0.15 (0.10 Typical)</td>
<td>0.15 (0.10 Typical)</td>
<td>0.25 (0.10 Typical)</td>
</tr>
<tr>
<td>Min. Return Loss (dB)</td>
<td>30 (35 Typical)</td>
<td>30 (35 Typical)</td>
<td>55 (60 Typical)</td>
</tr>
</tbody>
</table>

*Laser Bandwidth

Polarity Option - RFP (Reverse Fiber Position)

Mark “X” on holder must be visible from boot window at initial state (Side A & B)

Ordering Information:

RFP (Reverse Fiber Position)

XGLO 300, 50/125µm Multimode, OM3

<table>
<thead>
<tr>
<th>Part #</th>
<th>Jacket Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBP-LCLC5L-(XX)AQ</td>
<td>OFNR</td>
</tr>
<tr>
<td>FBP-LCLC5L-(XX)AP</td>
<td>OFNP</td>
</tr>
<tr>
<td>FBP-LCLC5L-(XX)AH</td>
<td>LSZH</td>
</tr>
</tbody>
</table>

XGLO 550, 50/125µm Multimode, OM4

<table>
<thead>
<tr>
<th>Part #</th>
<th>Jacket Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBP-LCLCV-(XX)AQ</td>
<td>OFNR</td>
</tr>
<tr>
<td>FBP-LCLCV-(XX)AP</td>
<td>OFNP</td>
</tr>
<tr>
<td>FBP-LCLCV-(XX)AH</td>
<td>LSZH</td>
</tr>
</tbody>
</table>

XGLO Singlemode, OS1/OS2 (UPC)

<table>
<thead>
<tr>
<th>Part #</th>
<th>Jacket Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBP-LCULCUL-(XX)</td>
<td>OFNR</td>
</tr>
<tr>
<td>FBP-LCULCUL-(XX)P</td>
<td>OFNP</td>
</tr>
<tr>
<td>FBP-LCULCUL-(XX)H</td>
<td>LSZH</td>
</tr>
</tbody>
</table>

Bulk Pack Option:

Available in lengths 5 meters (16.4 ft.) or less.

Remove dashes “-” and add “B” to the end of the part number for bulk pack of 100 jumpers (10 per bag)

Use (XX) to specify length: 01 =1 m (3.28 ft.); 02 = 2m (6.56 ft.); 03 = 3m (9.8 ft); 05 = 5m (16.4 ft)

Note: Polarity CFP (Continuous Fiber Position) is available as an option. Remove the first dash “-” and add C to the end of the RFP part number.

Example: FBP/LCULCUL-(XX)AC

SIEMON

www.siemon.com
XGLO® Jumper & Pigtails

XGLO fiber optic cable assemblies are ideal for supporting 10 Gigabit fiber applications over extended distances and next-generation backbones. XGLO cable assemblies feature premium fiber that meets IEEE 802.3 10 Gigabit Ethernet Standard as well as IEC-60793-2-10 and TIA-492AAAC (OM3), TIA-492AAAD (OM4) specifications for laser bandwidth Differential Mode Delay (DMD) specifications. In addition, these assemblies offer a superior connector polish that meets stringent Telcordia and ISO/IEC specifications for end-face geometry and exceeds all ISO/IEC and ANSI/TIA insertion loss and return loss requirements.

These precision cable assemblies are warranted for 20 years and ensure optimum applications support for 10 Gigabit Ethernet serial transmission when installed in a qualified XGLO system. 100% factory inspection ensures superior performance and quality.

**Supports 10 Gigabit Ethernet**

- Singlemode assemblies feature blue connectors with a yellow jacket; Multimode assemblies feature beige connectors with an aqua jacket
- Dust caps included to protect factory polish from dirt and damage
- SC duplexing clip allows for polarity correction
- Laser bandwidth optimized cable reduces impurities in the core of fiber, ensuring robust 10 Gigabit Ethernet transmission
- Exceeds ISO/IEC and TIA/EIA requirements for aging, exposure to humidity, temperature extremes, impact, vibration, coupling strength, and cable resistance to stress and strain
- 50/125µm Multimode and Singlemode assemblies available

**PERFORMANCE SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Wavelength (nm)</th>
<th>OM3 50/125µm Multimode</th>
<th>OM4 50/125µm Multimode</th>
<th>OS1/OS2 Singlemode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>850</td>
<td>1300</td>
<td>850*</td>
</tr>
<tr>
<td>Min. Cable Bandwidth (MHz·km)</td>
<td>1500 (OFL)</td>
<td>500 (OFL)</td>
<td>2000 (EMB)</td>
</tr>
<tr>
<td>Max. Insertion Loss (dB)</td>
<td>0.25 (0.10 Typical)</td>
<td>0.25 (0.10 Typical)</td>
<td>0.40 (0.10 Typical)</td>
</tr>
<tr>
<td>Min. Return Loss (dB)</td>
<td>30 (35 Typical)</td>
<td>30 (35 Typical)</td>
<td>55 (60 Typical)</td>
</tr>
</tbody>
</table>

*Laser Bandwidth*
### Ordering Information:

#### OFNR

**XGLO® 300, 50/125µm Multimode, OM3**

**Duplex Jumpers:**
- FJ2-SCSC5L-(XX)AQ .......... SC to SC aqua duplex jumper
- FJ2-LCSC5L-(XX)AQ .......... LC to SC aqua duplex jumper
- FJ2-SASAS5L-(XX)AQ .......... ST to ST aqua duplex jumper
- FJ2-LCSAS5L-(XX)AQ .......... LC to SC aqua duplex jumper

**Simplex Pigtails - 900 micron buffered**
- FP1B-SC5L-(XX)AQ .......... SC simplex pigtail, aqua
- FP1B-LC5L-(XX)AQ .......... LC simplex pigtail, aqua
- FP1B-SA5L-(XX)AQ .......... ST simplex pigtail, aqua

**XGLO 550, 50/125µm Multimode, OM4**

**Duplex Jumpers:**
- FJ2-SCSC5V-(XX)AQ .......... SC to SC aqua duplex jumper
- FJ2-LCSC5V-(XX)AQ .......... LC to SC aqua duplex jumper

**Simplex Pigtails - 900 micron buffered**
- FP1B-SC5V-(XX)AQ .......... SC simplex pigtail, aqua
- FP1B-LC5V-(XX)AQ .......... LC simplex pigtail, aqua

**XGLO Singlemode, OS1/OS2 (UPC)**

**Duplex Jumpers:**
- FJ2-SCUSC5L-(XX) .......... SC to SC yellow duplex jumper
- FJ2-LCUSC5L-(XX) .......... LC to LC yellow duplex jumper
- FJ2-SAUSAUL-(XX) .......... ST to ST yellow duplex jumper
- FJ2-LCSUSAUL-(XX) .......... LC to ST yellow duplex jumper

**Simplex Pigtails - 900 micron buffered**
- FP1B-SC5L-(XX) .......... SC simplex pigtail, yellow
- FP1B-LC5L-(XX) .......... LC simplex pigtail, yellow
- FP1B-SA5L-(XX) .......... ST simplex pigtail, yellow

**LSOH (IEC 60332-3C)**

**XGLO 300, 50/125µm Multimode, OM3**

**Duplex Jumpers:**
- FJ2-SCSC5L-(XX)AH .......... SC to SC aqua duplex jumper
- FJ2-LCSC5L-(XX)AH .......... LC to SC aqua duplex jumper

**Simplex Pigtails - 900 micron buffered**
- FP1B-SC5L-(XX)AH .......... SC simplex pigtail, aqua
- FP1B-LC5L-(XX)AH .......... LC simplex pigtail, aqua

**XGLO 550, 50/125µm Multimode, OM4**

**Duplex Jumpers:**
- FJ2-SCSC5V-(XX)AH .......... SC to SC aqua duplex jumper
- FJ2-LCSC5V-(XX)AH .......... LC to SC aqua duplex jumper

**Simplex Pigtails: 900 micron buffered**
- FP1B-SC5V-(XX)AH .......... SC simplex pigtail, aqua
- FP1B-LC5V-(XX)AH .......... LC simplex pigtail, aqua

**XGLO Singlemode, OS1/OS2 (UPC)**

**Duplex Jumpers:**
- FJ2-SCUSC5L-(XX)H .......... SC to SC yellow duplex jumper
- FJ2-LCUSC5L-(XX)H .......... LC to LC yellow duplex jumper
- FJ2-SAUSAUL-(XX)H .......... ST to ST yellow duplex jumper
- FJ2-LCSUSAUL-(XX)H .......... LC to ST yellow duplex jumper

**Simplex Pigtails - 900 micron buffered**
- FP1B-SC5L-(XX)H .......... SC simplex pigtail, yellow
- FP1B-LC5L-(XX)H .......... LC simplex pigtail, yellow
- FP1B-SA5L-(XX)H .......... ST simplex pigtail, yellow

**Bulk Pack Option:**
- SC and LC interface only.
- Available in lengths 5 meters (16.4 ft.) or less.
- Multimode OM3, OM4 and Singlemode OS1/OS2 only.
- Remove dashes "-" and add "B" to the end of the part number for bulk pack of 100 jumpers (10 per bag)

*Custom lengths and jacket colors are available upon request.*

*Contact our Customer Service Department for more information.*

*Use (XX) to specify length: 01 = 1m (3.3 ft.), 02 = 2m (6.56 ft.), 03 = 3m (9.8 ft.), 05 = 5m (16.4 ft.)*
XGLO® Singlemode LC & SC, APC Jumper & Pigtails

XGLO Singlemode LC and SC angled polish (APC) fiber optic cable assemblies are ideal for supporting high speed telecommunication network fiber applications such as FTXX, PON, POL, CATV, LAN, and WAN. XGLO APC cable assemblies feature premium fiber with a superior connector polish. The assemblies meet stringent TIA/EIA, Telcordia and ISO/IEC specifications for end-face geometry, mechanical, insertion loss and return loss requirements.

These precision cable assemblies are warranted for 20 years when installed in a qualified XGLO system. 100% inspection ensures superior performance and quality.


XGLO fiber optic cable assemblies meet all Telcordia and ISO/IEC specifications for ferrule end face geometry – including radius of curvature, apex offset, and spherical undercut. Compliance ensures minimum Return Loss, thereby reducing back reflection of laser energy which could degrade transmission performance or damage transceivers

APC assemblies feature green connectors with a yellow jacket

STANDARDS COMPLIANCE
- TIA/EIA-568-C.3
- IEC 60874
- ISO/IEC 11801
- TELCORDIA GR-326-CORE issue 4
*Tested in accordance with the Service Life requirements of Telcordia GR-326-CORE issue 4.
*LC 900um simplex pigtails are TIA/EIA and ISO/IEC compliant.

PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>Singlemode (OS1/OS2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength (nm)</td>
<td>1310 / 1550</td>
</tr>
<tr>
<td>Max. Insertion Loss (dB)</td>
<td>0.40 (0.15 Typical)</td>
</tr>
<tr>
<td>Min. Return Loss (dB)</td>
<td>65 (70 Typical)</td>
</tr>
</tbody>
</table>

Ordering Information:

OFNR

XGLO® Singlemode OS2 (APC)

Duplex Jumpers:
- FJ2-SCASCAL-(XX) SC to SC yellow duplex jumper
- FJ2-LCALCAL-(XX) LC to LC yellow duplex jumper
- FJ2-LCASCAL-(XX) LC to SC yellow duplex jumper

Simplex Pigtails - 900 micron buffered
- FP1B-SCAL-(XX) SC simplex pigtail, yellow
- FP1B-LCAL-(XX) LC simplex pigtail, yellow

Use (XX) to specify length: 01 = 1m (3.3 ft.), 02 = 2m (6.56 ft.), 03 = 3m (9.8 ft.), 05 = 5m (16.4 ft.)

LSOH (IEC 60332-3C)

XGLO Singlemode OS2 (APC)

Duplex Jumpers:
- FJ2-SCASCAL-(XX)H SC to SC yellow duplex jumper
- FJ2-LCALCAL-(XX)H LC to LC yellow duplex jumper
- FJ2-LCASCAL-(XX)H LC to SC yellow duplex jumper

Simplex Pigtails - 900 micron buffered
- FP1B-SCAL-(XX)H SC simplex pigtail, yellow
- FP1B-LCAL-(XX)H LC simplex pigtail, yellow

Custom lengths and jacket colors are available upon request. Contact our Customer Service Department for more information.
XGLO® Singlemode LC and SC, APC and UPC Simplex Jumpers

XGLO Singlemode LC and SC Simplex angled polish (APC) and ultra polish (UPC) fiber optic cable assemblies are ideal for supporting high speed telecommunication network fiber applications such as FTXX, PON, POL, CATV, LAN, and WAN. The cable assemblies feature Singlemode bend insensitive fiber with a superior connector polish. The assemblies meet stringent TIA/EIA, Telcordia and ISO/IEC specifications for endface geometry, mechanical, insertion loss and return loss requirements.

These precision cable assemblies are warranted for 20 years when installed in a qualified XGLO system. 100% inspection ensures superior performance and quality.

Performance Specifications

<table>
<thead>
<tr>
<th>Singlemode (OS1/OS2)</th>
<th>APC</th>
<th>UPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength (nm)</td>
<td>1310 / 1550</td>
<td></td>
</tr>
<tr>
<td>Max. Insertion Loss (dB)</td>
<td>0.40 (0.15 Typical)</td>
<td>0.40 (0.10 Typical)</td>
</tr>
<tr>
<td>Min. Return Loss (dB)</td>
<td>65 (70 Typical)</td>
<td>55 (60 Typical)</td>
</tr>
</tbody>
</table>

Ordering Information:

**LSOH (IEC 60332-3C)**

- XGLO Singlemode OS1/OS2
  - FJ1-LCALCAL-(XX)LC APC to LC APC yellow simplex jumper
  - FJ1-SCASCAL-(XX)SC APC to SC APC yellow simplex jumper
  - FJ1-LCACASAL-(XX)LC APC to SC APC yellow simplex jumper
  - FJ1-LCLUDUL-(XX)LC UPC to LC UPC yellow simplex jumper
  - FJ1-SCLUDUSC-(XX)SC UPC to SC UPC yellow simplex jumper
  - FJ1-LUCUSL-(XX)LC UPC to SC APC yellow simplex jumper
  - FJ1-LCUSCUL-(XX)LC UPC to SC APC yellow simplex jumper

**RISER (OFNR)**

- XGLO Singlemode OS1/OS2
  - FJ1-LCALCAL-(XX)LC APC to LC APC yellow simplex jumper
  - FJ1-SCASCAL-(XX)SC APC to SC APC yellow simplex jumper
  - FJ1-LCACASAL-(XX)LC APC to SC APC yellow simplex jumper
  - FJ1-LCLUDUL-(XX)LC UPC to LC UPC yellow simplex jumper
  - FJ1-SCLUDUSC-(XX)SC UPC to SC UPC yellow simplex jumper
  - FJ1-LUCUSL-(XX)LC UPC to SC APC yellow simplex jumper
  - FJ1-LCUSCUL-(XX)LC UPC to SC APC yellow simplex jumper

**PLENUM (OFNP)**

- XGLO Singlemode OS1/OS2
  - FJ1-LCALCAL-(XX)LC APC to LC APC yellow simplex jumper
  - FJ1-SCASCAL-(XX)SC APC to SC APC yellow simplex jumper
  - FJ1-LCACASAL-(XX)LC APC to SC APC yellow simplex jumper
  - FJ1-LCLUDUL-(XX)LC UPC to LC UPC yellow simplex jumper
  - FJ1-SCLUDUSC-(XX)SC UPC to SC UPC yellow simplex jumper
  - FJ1-LUCUSL-(XX)LC UPC to SC APC yellow simplex jumper
  - FJ1-LCUSCUL-(XX)LC UPC to SC APC yellow simplex jumper

**STANDARDS COMPLIANCE**

- TIA/EIA-568-C.3
- IEC 60874
- ISO/IEC 11801
- ITU-T G.652 D
- TELCORDIA GR-326-CORE issue 4

*Tested in accordance with the Service Life requirements of Telcordia GR-326-CORE issue 4.

Use (XX) to specify length: 01 = 1m (3.28 ft.), 02 = 2m (6.56 ft.), 03 = 3m (9.8 ft.), 05 = 5m (16.4 ft.)

Custom lengths and jacket colors are available upon request. Contact our Customer Service Department for more information.
XGLO® Mini-LC Duplex Fiber Cable Assemblies

Mini-LC duplex Multimode cable assemblies are designed to operate with the Mini SFP (mSFP) transceiver and enable a higher density deployment of active devices. The Mini-LC has a reduced centerline pitch of 5.25mm (0.2 in.) compared to a standard LC pitch of 6.25mm (0.24 in.). The smaller pitch minimizes the physical footprint and provides higher-density port count for data center network equipment. Black color duplex latch clips and boots are used to distinguish the Mini-LC Duplex connectors from the standard LC Duplex.

PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Wavelength (nm)</th>
<th>50/125 µm Multimode (OM3)</th>
<th>50/125 µm Multimode (OM4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. Cable Bandwidth (MHz·km)</td>
<td>850</td>
<td>1300</td>
</tr>
<tr>
<td>1500 (GFL)</td>
<td>500 (GFL)</td>
<td>2000 (EMB)</td>
</tr>
<tr>
<td>Max. Insertion Loss (dB)</td>
<td>0.25 (0.10 Typical)</td>
<td>0.25 (0.10 Typical)</td>
</tr>
<tr>
<td>Min. Return Loss (dB)</td>
<td>30 (35 Typical)</td>
<td>30 (35 Typical)</td>
</tr>
</tbody>
</table>

Ordering Information:

XGLO 300 50/125µm Multimode OM3 OFNR
Part # | Description
---|---
FJ2-LCMSL-(XX)A | Mini LC to Standard LC aqua duplex jumper
FJ2-LCMCLSL-(XX)A | Mini LC to Mini LC aqua duplex jumper

XGLO 550 50/125µm Multimode OM4 OFNR
Part # | Description
---|---
FJ2-LCMCL5L-(XX)A | Mini LC to Standard LC aqua duplex jumper
FJ2-LCMCLMSL-(XX)A | Mini LC to Mini LC aqua duplex jumper

Use (XX) to specify length: 01 = 1m (3.28 ft.), 02 = 2m (6.56 ft.), 03 = 3m (9.8 ft.), 05 = 5m (16.4 ft.)

www.siemon.com
LightSystem® Jumper & Pigtails

Siemon offers a comprehensive line of Multimode fiber jumpers and pigtails available in standard and custom lengths. Each and every terminated connector is optically tested to assure that 100% of the Siemon-built cable assemblies meet stringent performance specifications.

**PERFORMANCE SPECIFICATIONS**

<table>
<thead>
<tr>
<th></th>
<th>OM1 62.5/125µm Multimode</th>
<th>OM2 50/125µm Multimode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength (nm)</td>
<td>850</td>
<td>850</td>
</tr>
<tr>
<td>Min. Cable Bandwidth (MHz·km)</td>
<td>200</td>
<td>500</td>
</tr>
<tr>
<td>Max. Insertion Loss (dB)</td>
<td>0.50 (0.15 Typical)</td>
<td></td>
</tr>
<tr>
<td>Min. Return Loss (dB)</td>
<td>25 (30 Typical)</td>
<td></td>
</tr>
</tbody>
</table>

**Ordering Information:**

**OFNR**

**LightSystem Multimode Duplex Jumpers**
- FJ2-SCSC(X)MM-(XX) ................. SC to SC orange duplex jumper
- FJ2-SASA(X)MM-(XX) .................. ST to ST orange duplex jumper
- FJ2-SASC(X)MM-(XX) .................. ST to SC orange duplex jumper
- FJ2-LCLC(X)MM-(XX) .................. LC to LC orange duplex jumper
- FJ2-LCSC(X)MM-(XX) .................. LC to SC orange duplex jumper
- FJ2-LCSA(X)MM-(XX) .................. LC to ST orange duplex jumper

**LightSystem Multimode Simplex Pigtails - 900 micron buffered**
- FP1B-SC(X)MM-(XX) ................. SC simplex pigtail, orange
- FP1B-SA(X)MM-(XX) .................. ST simplex pigtail, orange
- FP1B-LC(X)MM-(XX) .................. LC simplex pigtail, orange

**LSOH (IEC 60332-3C)**

**LightSystem Multimode Duplex Jumpers**
- FJ2-SCSC(X)MM-(XX)H ............... SC to SC orange duplex jumper
- FJ2-SASA(X)MM-(XX)H ............... ST to ST orange duplex jumper
- FJ2-SASC(X)MM-(XX)H ............... ST to SC orange duplex jumper
- FJ2-LCLC(X)MM-(XX)H ............... LC to LC orange duplex jumper
- FJ2-LCSC(X)MM-(XX)H ............... LC to SC orange duplex jumper
- FJ2-LCSA(X)MM-(XX)H ............... LC to ST orange duplex jumper

**LightSystem Multimode Simplex Pigtails - 900 micron buffered**
- FP1B-SC(X)MM-(XX)H .............. SC simplex pigtail, orange
- FP1B-SA(X)MM-(XX)H .............. ST simplex pigtail, orange
- FP1B-LC(X)MM-(XX)H .............. LC simplex pigtail, orange

Use (X) to specify fiber type: 6 = 62.5/125µm (OM1); 5 = 50/125µm (OM2)

Use (XX) to specify length: 01 = 1m (3.28 ft.), 02 = 2m (6.56 ft.), 03 = 3m (9.8 ft.), 05 = 5m (16.4 ft.)

Custom lengths and jacket colors are available upon request. Contact our Customer Service Department for more information.
ValuLight™ Jumpers and Pigtails

ValuLight jumpers and pigtails provide exceptional value at a very competitive price. ValuLight fiber cable assemblies meet ISO/IEC 11801 and TIA-568-C.3 specifications for insertion loss and return loss. They are ideal for commercial cabling data applications up to and including 1 Gigabit.

PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Wavelength (nm)</th>
<th>OM1 62.5/125µm Multimode</th>
<th>OM2 50/125µm Multimode</th>
<th>OS1/OS2 Singlemode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. Cable Bandwidth (MHz·km)</td>
<td>200</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Max. Insertion Loss (dB)</td>
<td>0.75 (0.15 Typical)</td>
<td>0.75 (0.25 Typical)</td>
<td></td>
</tr>
<tr>
<td>Min. Return Loss (dB)</td>
<td>20 (25 Typical)</td>
<td>50 (55 Typical)</td>
<td></td>
</tr>
</tbody>
</table>

Ordering Information:

Multimode Duplex Jumpers

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>J2-SCSC(X)-(XX)</td>
<td>SC to SC orange duplex jumper, OFNR</td>
</tr>
<tr>
<td>J2-SASA(X)-(XX)</td>
<td>ST to ST orange duplex jumper, OFNR</td>
</tr>
<tr>
<td>J2-SASC(X)-(XX)</td>
<td>ST to SC orange duplex jumper, OFNR</td>
</tr>
<tr>
<td>J2-LCLC(X)-(XX)</td>
<td>LC to LC orange duplex jumper, OFNR</td>
</tr>
<tr>
<td>J2-LCSC(X)-(XX)</td>
<td>LC to SC orange duplex jumper, OFNR</td>
</tr>
<tr>
<td>J2-LCSA(X)-(XX)</td>
<td>LC to ST orange duplex jumper, OFNR</td>
</tr>
</tbody>
</table>

Multimode Pigtails

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1B-SC(X)-(XX)</td>
<td>SC orange simplex pigtail, 900 micron, buffered</td>
</tr>
<tr>
<td>P1B-SA(X)-(XX)</td>
<td>ST orange simplex pigtail, 900 micron, buffered</td>
</tr>
<tr>
<td>P1B-LC(X)-(XX)</td>
<td>LC orange simplex pigtail, 900 micron, buffered</td>
</tr>
</tbody>
</table>

Use (X) to specify fiber type: 6 = 62.5/125µm (OM1), 5 = 50/125µm (OM2)
Use (XX) to specify length: 01 = 1m (3.28 ft.), 02 = 2m (6.56 ft.), 03 = 3m (9.8 ft), 05 = 5m (16.4 ft.)

Singlemode OS2 Duplex Jumpers

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>J2-SCSCP-(XX)</td>
<td>SC to SC yellow duplex jumper, OFNR</td>
</tr>
<tr>
<td>J2-SASAP-(XX)</td>
<td>ST to ST yellow duplex jumper, OFNR</td>
</tr>
<tr>
<td>J2-SASCOP-(XX)</td>
<td>ST to SC yellow duplex jumper, OFNR</td>
</tr>
<tr>
<td>J2-LCLCP-(XX)</td>
<td>LC to LC yellow duplex jumper, OFNR</td>
</tr>
<tr>
<td>J2-LCSCP-(XX)</td>
<td>LC to SC yellow duplex jumper, OFNR</td>
</tr>
<tr>
<td>J2-LCSAP-(XX)</td>
<td>LC to ST yellow duplex jumper, OFNR</td>
</tr>
</tbody>
</table>

Singlemode OS2 Pigtails

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1B-SCP-(XX)</td>
<td>SC yellow simplex pigtail, 900 micron, buffered</td>
</tr>
<tr>
<td>P1B-SAP-(XX)</td>
<td>ST yellow simplex pigtail, 900 micron, buffered</td>
</tr>
<tr>
<td>P1B-LCP-(XX)</td>
<td>LC yellow simplex pigtail, 900 micron, buffered</td>
</tr>
</tbody>
</table>

Use (XX) to specify length: 01 = 1m (3.28 ft.), 02 = 2m (6.56 ft.), 03 = 3m (9.8 ft), 05 = 5m (16.4 ft.)

Custom lengths and jacket colors are available upon request. Contact our Customer Service Department for more information.
Siemon’s RazorCore fiber trunking cable assemblies provide an efficient and cost effective alternative to individual field-terminated components. Combining factory terminated connectors with Siemon RazorCore reduced O.D. cable in a high-performance cable assembly, Siemon RazorCore fiber trunking cable assemblies were designed with Local Area Networks (LAN), Data Centers and Storage Area Networks (SAN) applications in mind. These assemblies allow up to 75% faster field installation times. Standard configurations also help maintain consistent cable layout and facilitate efficient moves, adds and changes. These precision cable assemblies are 100% inspected ensuring superior performance and quality. SC, LC and SC-LC hybrids available.

**XGLO® Fiber Trunking RazorCore™ Cable Assemblies**

- **Reduced Pathway Fill** — Siemon’s RazorCore cable has significantly reduced cable O.D. resulting in less cable tray fill and pathway restrictions
- **Proper Orientation** — Each leg is designated for proper connector orientation
- **Multiple Fiber Types** — Available in OM3 and OM4 Multimode 50/125 laser optimized and OS1/OS2 Singlemode. Jacket ratings in riser, plenum and LSOH
- **Custom Configurations** — Available in 12, 24, 36 and 48 fiber counts
- **Factory Terminated and Tested** — Every fiber cable assembly is factory terminated and tested for premium performance
# XGLO® Fiber Trunking RazorCore™
## Cable Assemblies

### Ordering Information:

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>B = 12</th>
<th>D = 24</th>
<th>E = 36</th>
<th>F = 48</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber Type</td>
<td>L = OM3 XGLO 500 S/125 Multimode - Aqua</td>
<td>V = OM4 XGLO 550 S/125 Multimode - Aqua</td>
<td>A = OS1/OS2 Singlemode* - Yellow</td>
<td></td>
</tr>
<tr>
<td>Pulling Eye</td>
<td>A = Side A</td>
<td>B = Side B</td>
<td>C = None</td>
<td>D = Side A&amp;B</td>
</tr>
<tr>
<td>Cable Type</td>
<td>P = Plenum - Indoor Distribution (OFNP)</td>
<td>R = Riser - Indoor Distribution (OFNR)</td>
<td>L = LSOH - Indoor Distribution (IEC 60332-3C)</td>
<td></td>
</tr>
<tr>
<td>LEG OD (Side A)</td>
<td>A = 900µm</td>
<td>B = 2.0mm</td>
<td>C = 2.4mm (JC BladePatch only)</td>
<td>D = Simplex 900µm APC</td>
</tr>
<tr>
<td>LEG OD (Side B)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Non-armored only

** Ordering length is measured connector tip to connector tip. 2.0mm duplex and simplex 900 micron, buffered, 1m (3.28 ft.) breakout. Minimum order length is 4 metres (13.1 ft).

### Ordering Length

<Diagram of cable assembly>

Note: These products are made to order. Call for lead time and availability.

† Additional fiber counts 72, 96, and 144 available upon request.

www.siemon.com
XGLO® Fiber Trunking RazorCore™
Cable Assemblies

CABLE — Optical and Physical Specifications

<table>
<thead>
<tr>
<th>Fiber Cable Attenuation, Max (dB/km)</th>
<th><strong>XGLO® OM3 50/125 µm (850/1300 nm)</strong></th>
<th><strong>XGLO OM4 50/125 µm (850/1300 nm)</strong></th>
<th>XGLO OS1/OS2 Singlemode (1310/1550 nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-mode</td>
<td>3.0/1.0</td>
<td>3.0/1.0</td>
<td>0.4/0.4/0.3*</td>
</tr>
<tr>
<td>LED Bandwidth, min (MHz-km)</td>
<td>1500/500</td>
<td>3500/500</td>
<td>N/A</td>
</tr>
<tr>
<td>Effective Modal Bandwidth, min (MHz-km)</td>
<td>2000</td>
<td>4700</td>
<td>N/A</td>
</tr>
<tr>
<td>Cable Outer Jacket Color (Per TIA-598-C)</td>
<td>Aqua</td>
<td>Aqua</td>
<td>Yellow</td>
</tr>
</tbody>
</table>

*XGLO Singlemode fiber meets Low Water Peak specifications per ITU-T G.652.C/D
**XGLO Multimode cable premium fiber that meets IEEE 802.3 10 Gigabit Ethernet Standard as well as IEC-60793-2-10 and TIA-492AAAC (OM3) TIA-492AAAD (OM4) specifications for laser bandwidth Differential Mode Delay (DMD) specifications.

CONNECTORS — Optical Specifications

<table>
<thead>
<tr>
<th>Connector Type</th>
<th>IEC Intermateability Compliance</th>
<th>TIA Intermateability Compliance</th>
<th>Housing Color</th>
<th>Boot Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>IEC 60874-14</td>
<td>TIA/EIA-604-3</td>
<td>Blue</td>
<td>Beige</td>
</tr>
<tr>
<td>LC</td>
<td>IEC 61754-20</td>
<td>TIA/EIA-604-10</td>
<td>Blue</td>
<td>White</td>
</tr>
</tbody>
</table>

CONNECTORS — Physical Specifications

<table>
<thead>
<tr>
<th>Connector Type</th>
<th>IEC Intermateability Compliance</th>
<th>TIA Intermateability Compliance</th>
<th>Housing Color</th>
<th>Boot Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>IEC 60874-14</td>
<td>TIA/EIA-604-3</td>
<td>Blue</td>
<td>Beige</td>
</tr>
<tr>
<td>LC</td>
<td>IEC 61754-20</td>
<td>TIA/EIA-604-10</td>
<td>Blue</td>
<td>White</td>
</tr>
</tbody>
</table>

CABLE OUTSIDE DIAMETER COMPARISON

<table>
<thead>
<tr>
<th>Strand Count</th>
<th>RazorCore Cable Dia. (mm in.)</th>
<th>Traditional Distribution Dia. (mm in.)</th>
<th>% Reduction using RazorCore</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>3.0 (0.11 in.)</td>
<td>5.8 (0.22 in.)</td>
<td>48%</td>
</tr>
<tr>
<td>24</td>
<td>3.8 (0.14 in.)</td>
<td>8.8 (0.34 in.)</td>
<td>57%</td>
</tr>
<tr>
<td>36</td>
<td>8.7 (0.34 in.)</td>
<td>16.5 (0.64 in.)</td>
<td>47%</td>
</tr>
<tr>
<td>48</td>
<td>8.7 (0.34 in.)</td>
<td>16.5 (0.64 in.)</td>
<td>46%</td>
</tr>
</tbody>
</table>

CABLE & PULLING EYE ASSEMBLY

<table>
<thead>
<tr>
<th>Fiber Strand Count</th>
<th>Cable Diameter (mm in.)</th>
<th>Min Pulling Eye Bend Radius (mm in.)</th>
<th>Max Pulling Eye Diameter (mm in.)</th>
<th>*Required Duct Diameter (mm in.)</th>
<th>Max Pull Force (kgf lbf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>3.0 (0.11 in.)</td>
<td>380</td>
<td>44.5 (1.75 in.)</td>
<td>69.9 (2.75 in.)</td>
<td>18.1 (39.9 lbf)</td>
</tr>
<tr>
<td>24</td>
<td>3.8 (0.14 in.)</td>
<td>380</td>
<td>44.5 (1.75 in.)</td>
<td>69.9 (2.75 in.)</td>
<td>18.1 (39.9 lbf)</td>
</tr>
<tr>
<td>36</td>
<td>8.7 (0.34 in.)</td>
<td>915</td>
<td>63.5 (2.5 in.)</td>
<td>69.9 (2.75 in.)</td>
<td>18.1 (39.9 lbf)</td>
</tr>
<tr>
<td>48</td>
<td>8.7 (0.34 in.)</td>
<td>915</td>
<td>63.5 (2.5 in.)</td>
<td>88.9 (3.5 in.)</td>
<td>18.1 (39.9 lbf)</td>
</tr>
</tbody>
</table>

* Pulling eye assembly shall be capable of passing through these minimum duct diameter requirements during product installation.
Siemon’s fiber trunking cable assemblies provide an efficient and cost effective alternative to individual field-terminated components. Combining factory terminated connectors with Siemon cable in a high-performance cable assembly, Siemon fiber trunking cable assemblies were designed with Local Area Networks (LAN), Data Centers and Storage Area Networks (SAN) applications in mind. These assemblies allow up to 75% faster field installation times.

**XGLO® & LightSystem® Fiber Trunking Cable Assemblies**

- **Siemon Cable** — Utilizes high quality Siemon cable in both armored and non-armored choice of construction
- **Identification** — Each cable assembly is coded with a unique identification number for administrative purposes
- **Proper Orientation** — Each leg is designated for proper connector orientation
- **Superior Design** — Each cable assembly utilizes an epoxy breakout with spiral wrap to protect the fibers when entering an enclosure
- **Custom Assembly** — Fiber assemblies can be created to custom lengths and configurations based on a flexible part number scheme for performance options to best suit each installation
- **Factory Terminated and Tested** — Every fiber cable assembly is factory terminated and tested for premium performance
- **Enclosure Compatibility** — Siemon fiber trunking assemblies are compatible with all Siemon fiber enclosures
- **Pulling Eye** — An optional encapsulated protection sleeve with cable pulling eye protects the factory terminations during installation
- **Protective Packaging** — Dual shelf reel keeps unprotected connectivity from harm during payout

See ordering information next page
# Fiber Trunking Cable Assemblies

## Ordering Information:

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Pulling Eye</th>
<th>Fiber Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = 6</td>
<td>A = Side A</td>
<td>B = 62.5/125 Multimode</td>
</tr>
<tr>
<td>B = 12</td>
<td>B = Side B</td>
<td>C = 50/125 Multimode</td>
</tr>
<tr>
<td>C = 24</td>
<td>C = None</td>
<td>L = 100/125MM 50/125 Multimode OM3</td>
</tr>
<tr>
<td>E = 36</td>
<td>E = Side E</td>
<td>V = 100/150 50/125 Multimode OM2</td>
</tr>
<tr>
<td>F = 60</td>
<td>F = Side F</td>
<td>A = Singlemode OS1/OS2</td>
</tr>
<tr>
<td>G = 72</td>
<td>G = Side G</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connector (Side A)</th>
<th>Connector (Side B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC = LC</td>
<td>LC = LC</td>
</tr>
<tr>
<td>SC = SC</td>
<td>SC = SC</td>
</tr>
<tr>
<td>SA = SA</td>
<td>SA = SA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cable Type</th>
<th>Length Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>P = Plenum - Indoor Distribution (OFNP)</td>
<td>F = Feet</td>
</tr>
<tr>
<td>R = Riser - Indoor Distribution (OFNR)</td>
<td>M = Meters</td>
</tr>
<tr>
<td>L = LSZH - Indoor Distribution (IEC 60332-3C)</td>
<td></td>
</tr>
<tr>
<td>A = Plenum - Interlocking Armored (OFCP)</td>
<td></td>
</tr>
</tbody>
</table>

### Fiber Type:
- B = 62.5/125 Multimode
- C = 50/125 Multimode
- L = 100/125MM 50/125 Multimode OM3
- V = 100/150 50/125 Multimode OM2
- A = Singlemode OS1/OS2

### Pulling Eye:
- A = Side A
- B = Side B
- C = None

### Length Unit:
- F = Feet
- M = Meters

### Length**:
- Length must be 3 digits
- Example: 004 = 4m
- 012 = 12ft

### Notes:
- * Non-armored only
- ** Ordering length is measured connector tip to connector tip.
  900 micron, buffered, 1m (3.28 in.) breakout. Minimum order length is 4 meters (13.1 ft.)

---

Note: These products are made to order. Call for lead time and availability.
# Fiber Trunking Cable Assemblies

## CABLE — Optical and Physical Specifications

<table>
<thead>
<tr>
<th>Cable Type</th>
<th>LightSystem® 50/125 μm (OM1) (850/1300 nm)</th>
<th>Lightsystem 50/125 μm (OM2) (850/1300 nm)</th>
<th><strong>XGLO®</strong> 50/125 μm (OM3) (850/1300 nm)</th>
<th><strong>XGLO</strong> 50/125 μm (OM4) (850/1300 nm)</th>
<th>XGLO Singlemode (OS1/OS2) (1310/1550 nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber Cable Attenuation, Max (dB/km)</td>
<td>3.5/1.0</td>
<td>3.5/1.0</td>
<td>3.0/1.0</td>
<td>3.0/1.0</td>
<td>0.5/0.5*</td>
</tr>
<tr>
<td>OFL Bandwidth, min (MHz·km)</td>
<td>200/500</td>
<td>500/500</td>
<td>1500/500</td>
<td>3500/500</td>
<td>N/A</td>
</tr>
<tr>
<td>Effective Modal Bandwidth, min (MHz·km)</td>
<td>N/A</td>
<td>N/A</td>
<td>2000/NS</td>
<td>4700/NS</td>
<td>N/A</td>
</tr>
<tr>
<td>Cable Outer Jacket Color</td>
<td>Orange</td>
<td>Orange</td>
<td>Aqua</td>
<td>Aqua</td>
<td>Yellow</td>
</tr>
<tr>
<td>Break-Out Colors: Single Fiber Strands**</td>
<td>Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Unit Colors and/or Markings**</td>
<td>Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* XGLO Singlemode fiber meets Low Water Peak specifications per ITU-T G.652.C/D
** XGLO Multimode cable premium fiber that meets IEEE 802.3 10 Gigabit Ethernet Standard as well as IEC-60793-2-10 and TIA-492AAAC (OM3) TIA-492AAAD (OM4) specifications for laser bandwidth Differential Mode Delay (DMD) specifications.

## CONNECTORS — Optical Specifications

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Performance Class</th>
<th>Max Insertion Loss (dB)</th>
<th>Min Return Loss (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>62.5/125 μm Multimode (OM1)</td>
<td>LightSystem</td>
<td>0.65 (0.15 Typical)</td>
<td>25 (30 Typical)</td>
</tr>
<tr>
<td>50/125 μm Multimode (OM2)</td>
<td>LightSystem</td>
<td>0.65 (0.15 Typical)</td>
<td>25 (30 Typical)</td>
</tr>
<tr>
<td>50/125 μm Laser Optimized (OM3, OM4)</td>
<td>XGLO</td>
<td>0.25 (0.10 Typical)</td>
<td>30 (35 Typical)</td>
</tr>
<tr>
<td>Singlemode (OS1/OS2)</td>
<td>XGLO</td>
<td>0.40 (0.25 Typical)</td>
<td>55 (57 Typical)</td>
</tr>
</tbody>
</table>

## CONNECTORS — Physical Specifications

<table>
<thead>
<tr>
<th>Connector Type</th>
<th>IEC Intermateability Compliance</th>
<th>TIA Intermateability Compliance</th>
<th>Housing Color</th>
<th>Boot Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>IEC 60874-14</td>
<td>TIA/EIA-604-3</td>
<td>Blue</td>
<td>Beige</td>
</tr>
<tr>
<td>ST</td>
<td>IEC 60874-10</td>
<td>TIA/EIA-604-2</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>LC</td>
<td>IEC 61754-20</td>
<td>TIA/EIA-604-10</td>
<td>Blue</td>
<td>Beige</td>
</tr>
</tbody>
</table>

## CABLE DIAMETERS BY FIBER COUNT (ALL VALUES ARE NOMINAL)

<table>
<thead>
<tr>
<th>Cable Type</th>
<th>Fiber Strand Count</th>
<th>Sleeve Diameter mm / in.</th>
<th>Cable Diameter mm / in.</th>
<th>Minimum Bend Radius mm / in.</th>
<th>Required Duct Diameter mm / in.</th>
<th>Maximum Pull Force kgf/lbf.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Armored</td>
<td>6</td>
<td>44.5 (1.75 in.)</td>
<td>5.8 (0.22 in.)</td>
<td>15x cable diameter</td>
<td>70 (2.75 in.)</td>
<td>45.4 (100 lbf.)</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>44.5 (1.75 in.)</td>
<td>5.8 (0.22 in.)</td>
<td>15x cable diameter</td>
<td>70 (2.75 in.)</td>
<td>45.4 (100 lbf.)</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>44.5 (1.75 in.)</td>
<td>8.0 (0.34 in.)</td>
<td>15x cable diameter</td>
<td>70 (2.75 in.)</td>
<td>45.4 (100 lbf.)</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>63.5 (2.5 in.)</td>
<td>16.5 (0.64 in.)</td>
<td>20x cable diameter</td>
<td>90 (3.54 in.)</td>
<td>45.4 (100 lbf.)</td>
</tr>
<tr>
<td></td>
<td>48</td>
<td>63.5 (2.5 in.)</td>
<td>16.0 (0.62 in.)</td>
<td>20x cable diameter</td>
<td>90 (3.54 in.)</td>
<td>45.4 (100 lbf.)</td>
</tr>
<tr>
<td></td>
<td>72</td>
<td>63.5 (2.5 in.)</td>
<td>19.5 (0.76 in.)</td>
<td>20x cable diameter</td>
<td>90 (3.54 in.)</td>
<td>45.4 (100 lbf.)</td>
</tr>
<tr>
<td>Armored</td>
<td>12</td>
<td>44.5 (1.75 in.)</td>
<td>13.0 (0.51 in.)</td>
<td>15x cable diameter</td>
<td>90 (3.54 in.)</td>
<td>45.4 (100 lbf.)</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>44.5 (1.75 in.)</td>
<td>14.8 (0.58 in.)</td>
<td>15x cable diameter</td>
<td>90 (3.54 in.)</td>
<td>45.4 (100 lbf.)</td>
</tr>
</tbody>
</table>
## XLR8™ Fiber Termination Kit

Siemon’s XLR8 mechanical splice termination kit incorporates an exclusive dual-process activation tool which dramatically reduces termination time per connector. This process is intended for use with 900μm tight buffered fiber cables.

- **Robust Process** — Single-step termination prevents fiber movement by eliminating the need to handle the connector between splice and crimp processes, maintaining integrity of the splice.
- **Faster Terminations** — XLR8 tool combines both splice activation and mechanical crimp significantly reducing termination time.
- **Flexible Ergonomics** — Tool optimized for use in handheld or table-top orientation.
- **Fiber Alignment Aid** — Smooth alignment channel simplifies fiber insertion and avoids damage to fiber end face.
- **Oil Dampening System** — Oil dampering system allows the blade to cleave at a uniform speed eliminating user variance resulting in a consistent high quality cleave.
- **Cleaver Life Span** — Increased blade life span resulting in 48,000 cleaves.
- **Safety** — Integrated cleaver fiber collection bin eliminates handling of cleaved fiber.
- **Reduced Risk of Polish Contamination** — All termination steps completed with connector dust cap in place.
- **Universal LC/SC Compatibility** — Tool terminates both LC and SC connectors with no time-consuming changeover required.
- **Reliable** — XLR8 tool has been validated for over 500,000 cycles.
- **Precision Cleaver** — Kit features a user-friendly fiber cleaver designed to provide clean, precise and high performance cleaves on an array of fiber types.

### Ordering Information:

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTERM-XLR8</td>
<td>XLR8 fiber termination kit</td>
</tr>
</tbody>
</table>

**Kit Includes:**

- Activation tool
- Jacket stripper
- Buffer stripper
- Scissors
- Precision cleaver
- Strip template
- Marker
- Alcohol pads
- Electrical tape
- Convenient carrying case
- DVD instructions

### Replacement Parts

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTERM-XLR8-A</td>
<td>Fiber activation tool, replacement</td>
</tr>
<tr>
<td>FTERM-XLR8-C2</td>
<td>Precision fiber cleaver, replacement</td>
</tr>
</tbody>
</table>

[www.siemon.com](http://www.siemon.com)
XLR8™ Pre-Polished Connectors

Combined with the patent-pending XLR8 activation tool, Siemon’s pre-polished XLR8 mechanical splice connectors can be deployed with unsurpassed termination speed and quality. Available in both LC and SC configurations, these connectors support both the Multimode and Singlemode versions of Siemon’s 10 Gb/s XGLO® and Gigabit LightSystem® solutions.

Fewer Termination Steps – XLR8 SC connectors ship factory-assembled, eliminating time-consuming field assembly of inner and outer connector bodies

Enhanced Splice Integrity – XLR8 connector termination process combines splicing and crimping in a single step, eliminating connector handling that can impact splice integrity

Robust Polish Protection – Entire connector termination process is completed with dust-cap in place, protecting the critical end face polish from contamination

High Quality Performance – Exceeds TIA standards for optical performance and fiber retention strength

Ordering Information:

**LC Multimode**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC1M-LC-SV-B12</td>
<td>LC Simplex connector, beige, 50/125µm (OM3/OM4) laser optimized, 900µm buffered fiber*, aqua boot (XGLO)</td>
</tr>
<tr>
<td>FC1M-LC-6MM-B80</td>
<td>LC Simplex connector, beige, 62.5/125µm Multimode, 900µm buffered fiber*, beige boot (LightSystem)</td>
</tr>
<tr>
<td>FC1M-LC-5MM-B01</td>
<td>LC Simplex connector, beige, 50/125µm Multimode, 900µm buffered fiber*, black boot (LightSystem)</td>
</tr>
</tbody>
</table>

**LC Singlemode**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC1M-LC-SM-B06</td>
<td>LC Simplex connector, blue, Singlemode, 900µm buffered fiber*, blue boot (XGLO and LightSystem)</td>
</tr>
<tr>
<td>FC1M-LCA-SM-B07</td>
<td>LC Simplex connector, green, angled polished Singlemode, 900µm buffered fiber*, green boot (XGLO and LightSystem)</td>
</tr>
</tbody>
</table>

**SC Multimode**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC1M-SC-SV-B12</td>
<td>SC Simplex connector, beige, 50/125µm (OM3/OM4) laser optimized, 900µm buffered fiber*, aqua boot (XGLO)</td>
</tr>
<tr>
<td>FC1M-SC-6MM-B80</td>
<td>SC Simplex connector, beige, 62.5/125µm Multimode, 900µm buffered fiber*, beige boot (LightSystem)</td>
</tr>
<tr>
<td>FC1M-SC-5MM-B01</td>
<td>SC Simplex connector, beige, 50/125µm Multimode, 900µm buffered fiber*, black boot (LightSystem)</td>
</tr>
</tbody>
</table>

**SC Singlemode**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC1M-SC-SM-B06</td>
<td>SC Simplex connector, blue, Singlemode, 900µm buffered fiber*, blue boot (XGLO and LightSystem)</td>
</tr>
<tr>
<td>FC1M-SCA-SM-B07</td>
<td>SC Simplex connector, green, angled polished Singlemode, 900µm buffered fiber*, green boot (XGLO and LightSystem)</td>
</tr>
</tbody>
</table>

* For use with 900µm tight buffer terminations only - Fan-out kits to transition from 250µm to 900µm cannot be used with XLR8 connectivity.

www.siemon.com
SC and ST Epoxy Polish Connectors

SC Epoxy Polish Connectors

SC duplex connectors have a duplexing clip, which allows each connector to be removed individually. In the event fiber polarity is reversed during termination, there’s no need to discard the connector. Simply remove connectors from the clip and switch to correct the mistake, saving valuable installation time and money. The duplexing clip also speeds troubleshooting. In the event there’s a fault with a single connection, an individual connector can be removed from the clip and re-terminated without disturbing the adjacent connector.

SC connectors employ an outer housing that is color-coded in accordance with ISO/IEC 11801 Ed. 2.0 and ISO/IEC TIA/EIA-568-B.3 requirements (beige for Multimode and blue for Singlemode).

<table>
<thead>
<tr>
<th>Multimode (XGLO® and LightSystem®)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part #</td>
<td>Description</td>
</tr>
<tr>
<td>FC1-SC-MM-J80</td>
<td>SC simplex connector, beige, jacketed fiber, beige boot</td>
</tr>
<tr>
<td>FC1-SC-MM-B80</td>
<td>SC simplex connector, beige, buffered fiber, beige boot</td>
</tr>
<tr>
<td>FC2-SC-MM-B80</td>
<td>SC duplex connector, beige, buffered fiber, two beige boots</td>
</tr>
<tr>
<td>FC2-SC-MM-J06</td>
<td>SC duplex connector, jacketed fiber, one black boot and one beige boot</td>
</tr>
</tbody>
</table>

Add “-B” to the end of part number for bulk pack (Simplex: 100/box, Duplex: 50/box).

<table>
<thead>
<tr>
<th>Singlemode (XGLO)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part #</td>
<td>Description</td>
</tr>
<tr>
<td>FC1-SA-MM-J06</td>
<td>ST simplex connector, jacketed fiber, blue boot</td>
</tr>
<tr>
<td>FC1-SA-MM-B06</td>
<td>ST simplex connector, buffered fiber, blue boot</td>
</tr>
<tr>
<td>FC2-SA-MM-J06</td>
<td>ST duplex connector, jacketed fiber, blue boot</td>
</tr>
</tbody>
</table>

Add “-B” to the end of part number for bulk pack (100/box).

ST Epoxy Polish Connectors

The ST connector employs a rugged metal bayonet coupling ring with radial ramps which facilitate engagement to the studs of the mating adapter.

<table>
<thead>
<tr>
<th>Multimode (XGLO and LightSystem)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part #</td>
<td>Description</td>
</tr>
<tr>
<td>FC1-SA-MM-J80</td>
<td>ST simplex connector, jacketed fiber, beige boot</td>
</tr>
<tr>
<td>FC1-SA-MM-B80</td>
<td>ST simplex connector, buffered fiber, beige boot</td>
</tr>
</tbody>
</table>

Add “-B” to the end of part number for bulk pack (100/box).

<table>
<thead>
<tr>
<th>Singlemode (XGLO)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part #</td>
<td>Description</td>
</tr>
<tr>
<td>FC1-SA-SM-J06</td>
<td>ST simplex connector, jacketed fiber, blue boot</td>
</tr>
<tr>
<td>FC1-SA-SM-B06</td>
<td>ST simplex connector, buffered fiber, blue boot</td>
</tr>
</tbody>
</table>

Add “-B” to the end of part number for bulk pack (100/box).
LC Epoxy Polish Connectors (XGLO® & LightSystem®)

Siemon LC products offer all the benefits of SC and ST connections in a Small Form Factor (SFF), high-density design. LC adapter products are compatible with MAX®, CT®, FOB, and MX-SMTM work area and telecommunications room products, providing a wide variety of installation options. LC connectors take just two minutes to terminate, using the Siemon LightSpeed® Termination Kit.

Multimode

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC1-LC-MM-B80</td>
<td>LC simplex connector, beige, Multimode, buffered fiber, beige boot</td>
</tr>
<tr>
<td>FC2-LC-MM-J80</td>
<td>LC duplex connector, beige, Multimode, jacketed fiber, beige boots</td>
</tr>
</tbody>
</table>

Singlemode

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC1-LC-SM-B02</td>
<td>LC simplex connector, blue, Singlemode, buffered fiber, white boot</td>
</tr>
<tr>
<td>FC1-LC-SM-J02</td>
<td>LC simplex connector, blue, Singlemode, jacketed fiber, white boots</td>
</tr>
</tbody>
</table>

Add “-B” to the end of part number for bulk pack (Simplex: 100/box, Duplex: 50/box).

LightSpeed® ST, SC Fiber Termination Kit

Achieve faster fiber terminations and higher performance with Siemon’s LightSpeed Termination Kit. The Siemon fiber termination kit contains all the tools required for termination of Multimode or Singlemode ST or SC connectors — packaged in a rugged canvas carrying case. Kit includes LC microscope head. Use the optional LC Upgrade Kit (see below) for LC connector terminations. All consumables must be ordered separately as noted below.*

Part #       | Description                                           |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FTERM-L2</td>
<td>LightSpeed Fiber Termination Kit for ST and SC Multimode connectors*</td>
</tr>
</tbody>
</table>

Note: Select tools and other termination products supplied with the kit can be ordered separately.

*All consumables including primer, adhesive and polishing films are contained in the consumables kit and must be ordered separately.

LC Fiber Termination LightSpeed® Upgrade Kit

The Siemon LC upgrade kit is used in conjunction with the LightSpeed Termination Kit (FTERM-L2) and has all the accessories to terminate LC connectors using Siemon’s exclusive LightSpeed adhesive. The kit includes an LC polishing puck and a micro-torch* (to shrink the color-coded LC crimp sleeve tubing). The LC microscope head is included with the FTERM-L2 kit.

Part #       | Description                                           |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FTERM-LC</td>
<td>LC Fiber Termination Upgrade Kit (used in conjunction with FTERM-L2)</td>
</tr>
</tbody>
</table>

Note: Contents of FTERM-LC are also available individually.

Contact our Customer Service Department for more information.

*Butane fuel not included.
**LightSpeed® Fiber Consumables Kit**

Siemon's LightSpeed fiber terminations consumables kit features a premium abrasive film to polish ceramic ferrules and glass at the same level. The films have been qualified to assure exceptional insertion and return loss results when used in accordance with Siemon instructions.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT-KIT-L2*</td>
<td>Consumables kit for use with fiber termination kit (FTERM-L2). Includes enough consumables to perform a minimum of 200 Multimode or Singlemode terminations</td>
</tr>
</tbody>
</table>

Individual components may be ordered separately as replacements. Part numbers listed below.

- FT-PRBOTL: Primer bottle (3.5mL)
- FT-ADHL*: Adhesive syringe (5cc)
- FT-ALPAD: Alcohol pads
- FT-WIFES: Dry lint-free wipes
- FT-SYMTIP: Syringe tip needles w/cover
- FT-FF: Finishing film, white
- FT-PF1: 1µm polish film, purple
- FT-PF3: 3µm polish film, pink
- FT-PF12: 12µm air polish film, gray
- FT-PF6**: 6µm recovery film, bronze

*This product contains material with a time and temperature sensitive shelf life. Store between 4.4 to 38.5°C (39.2 to 101.3°F) and verify expiration date marked on product prior to use.

**This recovery film is optional and not included with the consumables kit.

**Replacement Tools for Fiber Termination Kits**

Siemon offers a full line of replacement tools in the event that a tool is lost or has used up its life expectancy. The replacement tools are the exact tools provided in the fiber termination kits.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT-MS400</td>
<td>400X power microscope</td>
</tr>
<tr>
<td>FT-SCRIBE</td>
<td>Double bladed fiber cleaver</td>
</tr>
<tr>
<td>CI-SCISSORS</td>
<td>Electrician scissors</td>
</tr>
<tr>
<td>FT-CRIMP</td>
<td>Crimp tool w/3-position die for ST/SC/LC</td>
</tr>
<tr>
<td>FT-PAD</td>
<td>152.4 x 152.4mm (6 x 6 in.) polishing pad</td>
</tr>
<tr>
<td>FT-PUCK</td>
<td>SC/ST compatible polishing puck</td>
</tr>
<tr>
<td>FT-TMPL</td>
<td>Template for SC/ST and LC connectors</td>
</tr>
<tr>
<td>FT-JSTRP</td>
<td>Jacket stripper</td>
</tr>
<tr>
<td>FT-BSTRP</td>
<td>Buffer stripper</td>
</tr>
<tr>
<td>FT-LCPUCK</td>
<td>Duplex LC Polishing Puck</td>
</tr>
<tr>
<td>FT-MSLC2HEAD</td>
<td>Duplex LC Scope Adapter</td>
</tr>
</tbody>
</table>
Fusion Splice Solutions - Fiber Splice Modules

Siemon Splice Modules provide an interface between bulk cable and LC duplex jumpers that connect directly to active equipment. The splice modules are offered in ribbon or 900um tight buffer pigtail options. These modules allow mass-fusion splicing of ribbon pigtails directly to ribbon cable or 900um tight buffer pigtails to loose fiber cable. The splice modules are designed using Siemon’s Quick-Pack® footprint and work in conjunction with Siemon’s Expanded RIC or FCP3 fiber enclosures.

**Color Coded Fibers** — Allows for like-color fibers to be fusion spliced on each side of the channel to eliminate confusion

**Jacketed Pigtail** — Available in ribbon or 900um tight buffer fiber

**Quick-Pack® Splice Modules** — Can be inserted or removed with a single finger for quick and easy access

**LC Interface** — Available in 12 or 24 fibers

**Strain Relief** — Cable passes through strain relief boot at the rear of the module and is preterminated to an LC connector plugged into the back of the LC adapter. Custom designed boot maintains bend radius for the fiber exiting the modules

### Fiber Splice Module Performance

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>MAX. Insertion Loss (db)</th>
<th>MIN. Return Loss (db)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6MM 62.5/125 (OM1)</td>
<td>0.50</td>
<td>25</td>
</tr>
<tr>
<td>5MM 50/125 (OM2)</td>
<td>0.50</td>
<td>25</td>
</tr>
<tr>
<td>5L-MM 50/125 (OM3)</td>
<td>0.25</td>
<td>30</td>
</tr>
<tr>
<td>5V-MM 50/125 (OM4)</td>
<td>0.25</td>
<td>30</td>
</tr>
<tr>
<td>SM-LWP SM (OS1/OS2)</td>
<td>0.25</td>
<td>55</td>
</tr>
</tbody>
</table>

* Opposing splice module types must be used on opposite ends (example: “A” side & “B” side) of the same fiber link to maintain proper polarity from transmitter to receiver

### Ordering Information

**Fiber Type**

- Blank = Ribbon
- 2 = 900um Tight Buffer
- 12 = 12 port
- 24 = 24 port
- Blank = UPC
- A = APC (Singlemode Only)

**Module Type**

- A = A Side Polarity
- B = B Side Polarity

**Polish**

- Blank = UPC
- A = APC (Singlemode Only)

**Fiber Construction**

- Blank = Ribbon
- 2 = 900um Tight Buffer

**Expanded RIC Fiber Enclosures**

The fiber splice modules can be used in Siemon’s Expanded RIC or FCP3 fiber enclosures.

www.siemon.com
Fusion Splice Solutions - MTP Pigtails

Siemon’s fusion splice solutions include an MTP pigtail option which can be connected to a RIC MTP adapter plate or plug and play module and then mass fusion spliced within the fiber enclosures. MTP pigtails are the ideal solution when field-installing an MTP interface for a 40/100G application.

**Fiber Type**
- 5L: OM3 XGLO 300 Low Loss
- 5V: OM4 XGLO 500 Low Loss
- SM-LWP: OS1/OS2 XGLO Singlemode

**Performance**
- All MTP pigtails are manufactured to Low Loss specifications

**Ordering Information**

- Cable Jacket: A = Ribbon Jacket
- MTP Gender: MM = MTP Male, MF = MTP Female
- Fiber Type: 5L = OM3 XGLO 300 62.5/125 Multimode, 5V = OM4 XGLO 500 50/125 Multimode, SM = OS1/OS2 Singlemode

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Performance Class</th>
<th>Max. Insertion Loss (db)</th>
<th>Min. Return Loss (db)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5L</td>
<td>OM3 XGLO 300 Low Loss</td>
<td>0.20</td>
<td>20</td>
</tr>
<tr>
<td>5V</td>
<td>OM4 XGLO 500 Low Loss</td>
<td>0.20</td>
<td>20</td>
</tr>
<tr>
<td>SM-LWP</td>
<td>OS1/OS2 XGLO Singlemode</td>
<td>0.75</td>
<td>55</td>
</tr>
</tbody>
</table>

**Jacketed Pigtail**
- Available in ribbon fiber, OM3, OM4 and Singlemode

**Identification**
- Pigtails are serialized for easy identification and reference to test data that ships with every pigtail

**MTP PIGTAIL OPTICAL SPECIFICATIONS**

- **Cable Jacket Rating**
  - P = Plenum
  - L = LSZH

- **Length Unit**
  - F = Feet
  - M = Meter

- **Length**
  - Length must be 3 digits
  - Example: 03 = 3m
  - 10 = 10 ft.

**FP12(X)-(XX)(XX)(X)-(XX)(X)**

- The MTP pigtail allows for field-installable MTP connectivity using ribbon cable and mass fusion splice installation practices
Siemon’s Rack Mount Interconnect Center provides superior fiber density without sacrificing protection and accessibility. Key features include extending the depth of the enclosure to allow added space for fusion splicing and cable slack storage. With superior cable management, port identification, fiber accessibility and security, the Expanded RIC is the best way to protect mission critical fiber connections.

**Expanded RIC Enclosure Dimensions**

<table>
<thead>
<tr>
<th>Expanded RIC Part #</th>
<th>Mounting Bracket Position</th>
<th>A (mm/in.)</th>
<th>B (mm/in.)</th>
<th>C (mm/in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIC3-E-24-01</td>
<td>1</td>
<td>109.7 (4.31 in.)</td>
<td>360.4 (14.1 in.)</td>
<td>85.7 (3.37 in.)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>147.8 (5.81 in.)</td>
<td>322.3 (12.6 in.)</td>
<td>85.7 (3.37 in.)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>185.9 (7.31 in.)</td>
<td>284.2 (11.1 in.)</td>
<td>85.7 (3.37 in.)</td>
</tr>
<tr>
<td>RIC3-E-36-01</td>
<td>1</td>
<td>109.7 (4.31 in.)</td>
<td>360.4 (14.1 in.)</td>
<td>85.7 (3.37 in.)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>147.8 (5.81 in.)</td>
<td>322.3 (12.6 in.)</td>
<td>85.7 (3.37 in.)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>185.9 (7.31 in.)</td>
<td>284.2 (11.1 in.)</td>
<td>85.7 (3.37 in.)</td>
</tr>
<tr>
<td>RIC3-E-48-01</td>
<td>1</td>
<td>109.7 (4.31 in.)</td>
<td>360.4 (14.1 in.)</td>
<td>130.2 (5.12 in.)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>147.8 (5.81 in.)</td>
<td>322.3 (12.6 in.)</td>
<td>130.2 (5.12 in.)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>185.9 (7.31 in.)</td>
<td>284.2 (11.1 in.)</td>
<td>130.2 (5.12 in.)</td>
</tr>
<tr>
<td>RIC3-E-72-01</td>
<td>1</td>
<td>109.7 (4.31 in.)</td>
<td>360.4 (14.1 in.)</td>
<td>174.6 (6.87 in.)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>147.8 (5.81 in.)</td>
<td>322.3 (12.6 in.)</td>
<td>174.6 (6.87 in.)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>185.9 (7.31 in.)</td>
<td>284.2 (11.1 in.)</td>
<td>174.6 (6.87 in.)</td>
</tr>
</tbody>
</table>

**Fusion Splice Max Capacity**

<table>
<thead>
<tr>
<th>Solution</th>
<th>Splice Type</th>
<th>FCP3</th>
<th>RIC3-24</th>
<th>RIC3-36</th>
<th>RIC3-48</th>
<th>RIC3-72</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTP Pigtail</td>
<td>Fusion Ribbon</td>
<td>216</td>
<td>288</td>
<td>288</td>
<td>288</td>
<td>432</td>
</tr>
<tr>
<td>Fiber Splice Module</td>
<td>Fusion Ribbon</td>
<td>72</td>
<td>96</td>
<td>144</td>
<td>192</td>
<td>288</td>
</tr>
<tr>
<td></td>
<td>Fusion 900m</td>
<td>72</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>144</td>
</tr>
</tbody>
</table>

www.siemon.com
Fiber Connect Panel

The Fiber Connect Panel is a rack-mounted fiber enclosure that can be fitted with hard-mount adapters. It is designed to connect, protect, and manage up to 48 fibers in a low profile 1U rack space. The FCP3-R can be supplied empty (FCP3-R-01) or fully-loaded — and populated to provide terminations for 24 fibers in SC and 48 fibers in the LC version.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCP3-R-01</td>
<td>Fixed patch panel, 1U, C/W 12 blanks, Fiber management, black</td>
</tr>
<tr>
<td>FA2-SCSC-01</td>
<td>Fiber adapter, SC duplex, MM or SM, PB**</td>
</tr>
<tr>
<td>FA4-LCLC-06C</td>
<td>Fiber adapter, LC quad, SM, PB sleeve, blue**</td>
</tr>
<tr>
<td>FA4-LCLC-80C</td>
<td>Fiber adapter, LC quad, MM, PB sleeve, beige**</td>
</tr>
<tr>
<td>FA-BLANK</td>
<td>Fiber adapter Blank, black**</td>
</tr>
</tbody>
</table>

** Add “B” to the end of part number for bulk pack of 48.

FCP3-RACK .............. 6- to 72-fiber (up to 288 fiber with MTP adapter plates) Fiber Connect Panel with fixed tray, accepts (3) Quick-Pack® adapter plates, 1U, black. Includes mounting brackets, housing/cover, fiber managers and grommet
- height: 43.2mm (1.7 in.)
- width: 482.6mm (19 in.)
- depth: 241.3mm (9.5 in.)

Note: 1U = 44.5 mm (1.75 in.)

Mass Fusion Splice Accessories

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HT-MFS</td>
<td>40mm mass fusion heat shrink sleeve for ribbon fiber</td>
</tr>
<tr>
<td>TRAY-4-R-MFS</td>
<td>Mass fusion splice tray for up to (6) 12 fiber splices with sleeve protection holder</td>
</tr>
</tbody>
</table>

Single Fiber Fusion Splice Accessories

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HT-40</td>
<td>40mm single fiber heat shrink sleeve</td>
</tr>
<tr>
<td>HT-60</td>
<td>60mm single fiber heat shrink sleeve</td>
</tr>
</tbody>
</table>
* Heating times may vary depending on heat source.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAY-3</td>
<td>Standard splice tray for up to 24 fusion splices with sleeve protection. For use with Expanded RIC and FCP3 fiber enclosures</td>
</tr>
<tr>
<td>TRAY-M-3</td>
<td>Mini splice tray for up to 12 fusion splices with sleeve protection</td>
</tr>
</tbody>
</table>
Siemon indoor ribbon fiber cables are ideal for data centers, campus and building backbones. Ribbon cables enable the migration to high fiber count systems required to support high bandwidth applications including 10, 40 and 100Gb/s. These cables contain 12-fiber ribbon units inside a central tube with dielectric strength members for tensile strength and color coded fibers with individual ribbon unit ID numbers for clear identification. Siemon fiber optic cables are offered in XGLO configurations supporting high-speed applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.

Ordering Information

XGLO Multimode Laser Optimized 50/125 OM3 and OM4 (Aqua Jacket), Singlemode OS1/OS2 (Yellow Jacket)

<table>
<thead>
<tr>
<th>Part #</th>
<th>Fiber Count</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>9BR(X)(X)012G-(XXXX)(Y)</td>
<td>12</td>
<td>1 ribbon with 12 fibers</td>
</tr>
<tr>
<td>9BR(X)(X)024G-(XXXX)(Y)</td>
<td>24</td>
<td>2 ribbons with 12 fibers</td>
</tr>
<tr>
<td>9BR(X)(X)036G-(XXXX)(Y)</td>
<td>36</td>
<td>3 ribbons with 12 fibers</td>
</tr>
<tr>
<td>9BR(X)(X)048G-(XXXX)(Y)</td>
<td>48</td>
<td>4 ribbons with 12 fibers</td>
</tr>
</tbody>
</table>

XGLO 550 Multimode 50/125, OM4

STANDARDS COMPLIANCE

ISO/IEC 11801:2002 OM4

APPLICATIONS SUPPORT

APPLICATION | DISTANCE (m) |
-------------|---------------|
10GBASE-S (850 nm) | 550 |
10GBASE-L (1300 nm) | 300 |
10GBASE-E (1300 nm) | 1000 |
ATM 622 (1300 nm) | 1500 |
ATM 555 (1300 nm) | 3000 |
ATM 52 (1300 nm) | 3000 |
FD01 (Original 1300 nm) | 5000 |
10GBASE-FX (1300 nm) | 2000 |

APPLICATIONS SUPPORT

APPLICATION | DISTANCE (m) |
-------------|---------------|
10GBASE-S (850 nm) | 550 |
10GBASE-L (1300 nm) | 300 |
10GBASE-E (1300 nm) | 1000 |
ATM 622 (1300 nm) | 1500 |
ATM 555 (1300 nm) | 3000 |
ATM 52 (1300 nm) | 3000 |
FD01 (Original 1300 nm) | 5000 |
10GBASE-FX (1300 nm) | 2000 |

APPLICATIONS SUPPORT

APPLICATION | DISTANCE (m) |
-------------|---------------|
10GBASE-S (850 nm) | 550 |
10GBASE-L (1300 nm) | 300 |
10GBASE-E (1300 nm) | 1000 |
ATM 622 (1300 nm) | 1500 |
ATM 555 (1300 nm) | 3000 |
ATM 52 (1300 nm) | 3000 |
FD01 (Original 1300 nm) | 5000 |
10GBASE-FX (1300 nm) | 2000 |

Use first (X) to specify fiber type: 5 = 50/125µm, 8 = Singlemode

Use second (X) to specify fiber jacket type: R = Riser OFNR, P = Plenum OFNP, H = LSOH

Use (XXXX) to specify class performance: T312 = OM3 50µm Laser Optimized, T512 = OM4 50µm Laser Optimized, E205 = OS1/OS2 Singlemode

Use (Y) to specify unit of measure: A = feet for North America, M = meter for International

Note: 288 strand count is only available in a Riser (OFNR) jacket.

Standards Compliance


ANSI/TIA/EIA-568-C.3

ANSI/TIA-598-C

Telcordia GR-409-CORE

ITU-T G.652 C/D

OFNR: Communications Type OFNR (ETL) and CSA FT4 (ETL)

OFNP: Communications Type OFNP (ETL) and CSA FT6 (ETL)

IEC 60332-3

IEC 60332-1-2 (Single strand)

IEC 60754-2 (Acid gas)

IEC 61034-2 (Smoke density)

APPLICATIONS SUPPORT

APPLICATION | DISTANCE (m) |
-------------|---------------|
10GBASE-S (850 nm) | 300 |
10GBASE-LX4 (1300 nm) | 300 |
1000BASE-S (850 nm) | 1000 |
1000BASE-LX (1300 nm) | 600 |
ATM 622 (1300 nm) | 1500 |
ATM 555 (1300 nm) | 3000 |
ATM 52 (1300 nm) | 3000 |
FD01 (Original 1300 nm) | 5000 |
1000BASE-FX (1300 nm) | 2000 |

APPLICATIONS SUPPORT

APPLICATION | DISTANCE (m) |
-------------|---------------|
10GBASE-S (850 nm) | 550 |
10GBASE-L (1300 nm) | 300 |
1000BASE-S (850 nm) | 1100 |
1000BASE-LX (1300 nm) | 600 |
ATM 622 (1300 nm) | 1500 |
ATM 555 (1300 nm) | 3000 |
ATM 52 (1300 nm) | 3000 |
FD01 (Original 1300 nm) | 5000 |
1000BASE-FX (1300 nm) | 2000 |

APPLICATIONS SUPPORT

APPLICATION | DISTANCE (m) |
-------------|---------------|
10GBASE-S (850 nm) | 300 |
10GBASE-LX4 (1300 nm) | 300 |
1000BASE-S (850 nm) | 1000 |
1000BASE-LX (1300 nm) | 600 |
Fibre Channel 266 (1300 nm) | 1500 |
Fibre Channel 622 (1300 nm) | 3000 |
Fibre Channel 622 (1300 nm) | 600 |
ATM 622 (1300 nm) | 1500 |
ATM 555 (1300 nm) | 3000 |
ATM 52 (1300 nm) | 3000 |
FD01 (Original 1300 nm) | 5000 |
1000BASE-FX (1300 nm) | 2000 |

ORDERING INFORMATION

Part # | Fiber Count | Construction |
-------|-------------|--------------|
9BRXXXX072G-(XXXX)(Y) | 72 | 6 ribbons with 12 fibers |
9BRXXXX084G-(XXXX)(Y) | 96 | 8 ribbons with 12 fibers |
9BRXXXX144G-(XXXX)(Y) | 144 | 12 ribbons with 12 fibers |
9BRXXXX216G-(XXXX)(Y) | 216 | 18 ribbons with 12 fibers |
9BRXXXX288G-(XXXX)(Y) | 288 | 24 ribbons with 12 fibers |

Siemon indoor ribbon fiber cables are ideal for data centers, campus and building backbones. Ribbon cables enable the migration to high fiber count systems required to support high bandwidth applications including 10, 40 and 100Gb/s. These cables contain 12-fiber ribbon units inside a central tube with dielectric strength members for tensile strength and color coded fibers with individual ribbon unit ID numbers for clear identification. Siemon fiber optic cables are offered in XGLO configurations supporting high-speed applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.
## XGLO® Indoor Ribbon Fiber Cable (Global)

### Minimum Performance Parameters for XGLO 50/125μm Multimode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Guaranteed Gigabit Transmission Distance (m)</th>
<th>Guaranteed 10 Gigabit Transmission Distance (m)</th>
<th>Minimum Bandwidth (MHz-km)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Group Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>50/125 (OM3)</td>
<td>1000</td>
<td>600</td>
<td>300</td>
<td>300</td>
<td>RML - 2000</td>
</tr>
<tr>
<td>50/125 (OM4)</td>
<td>1100</td>
<td>600</td>
<td>550</td>
<td>300</td>
<td>RML - 4700</td>
</tr>
</tbody>
</table>

† 10GBASE-S †† 10GBASE-LX4

### Minimum Performance Parameters for XGLO Singlemode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Wavelength (nm)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Zero Dispersion Wavelength (nm)</th>
<th>Zero Dispersion Slope (nm/km)</th>
<th>Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singlemode (OS1/OS2)</td>
<td>1310</td>
<td>0.40</td>
<td>1317</td>
<td>&lt;0.092</td>
<td>1.468</td>
</tr>
<tr>
<td></td>
<td>1300 ± 24</td>
<td>0.40</td>
<td>1317</td>
<td>&lt;0.092</td>
<td>1.468</td>
</tr>
<tr>
<td></td>
<td>1380</td>
<td>0.40</td>
<td>1317</td>
<td>&lt;0.092</td>
<td>1.468</td>
</tr>
<tr>
<td></td>
<td>1550</td>
<td>0.30</td>
<td>1317</td>
<td>&lt;0.092</td>
<td>1.468</td>
</tr>
</tbody>
</table>

### PHYSICAL SPECIFICATIONS (All Values Are Nominal)

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Nominal Cable Diameter mm</th>
<th>Maximum Pulling Tension Newtons</th>
<th>Maximum Net Weight kg/km</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OFNR/OFNP/LSOH</td>
<td>OFNR/OFNP/LSOH</td>
<td>OFNR/OFNP/LSOH</td>
</tr>
<tr>
<td>12, 24, 36</td>
<td>9.7</td>
<td>1320</td>
<td>400</td>
</tr>
<tr>
<td>72, 96</td>
<td>12.4</td>
<td>140</td>
<td>156</td>
</tr>
<tr>
<td>144, 216</td>
<td>15.2</td>
<td>184</td>
<td>220</td>
</tr>
<tr>
<td>288</td>
<td>20.1 (OFNR only)</td>
<td>309</td>
<td>n/a</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Maximum Crush Resistance (N/mm)</th>
<th>Maximum Flex Resistance (N/mm)</th>
<th>Operating Temperature °C</th>
<th>Installation Temperature °C</th>
<th>Storage Temperature °C</th>
<th>Minimum Bend Radius (cm)</th>
<th>Minimum Bend Radius (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OFNR</td>
<td>OFNP</td>
<td>LSOH</td>
<td>OFNR</td>
<td>OFNP</td>
<td>LSOH</td>
<td>OFNR</td>
</tr>
<tr>
<td>12, 24, 36, 48</td>
<td>25</td>
<td>-20 to 70</td>
<td>-20 to 70</td>
<td>-40 to 70</td>
<td>0 to 70</td>
<td>-10 to 60</td>
<td>0 to 60</td>
</tr>
<tr>
<td>72, 96</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>144, 216</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>288</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Custom lengths are available upon request. Contact our Customer Service Department for more information.

Because we continuously improve our products, Siemon reserves the right to change specifications and availability without prior notice.

XGLO® and LightSystem® are trademarks of Siemon
Siemon indoor tight buffer cables are ideal for data centers, campus and building backbones. Siemon fiber optic cables are offered in XGLO and LightSystem configurations supporting high-speed applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.

### Ordering Information

**LightSystem: Multimode 62.5/125 OM1, Multimode 50/125 OM2 (Orange Jacket)**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Fiber Count</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>9F(X)B(X)-2FXXXX</td>
<td>2</td>
<td>1 tube of 2 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-4AXXXX</td>
<td>4</td>
<td>1 tube of 4 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-4BXXXX</td>
<td>6</td>
<td>1 tube of 6 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-8CXXXX</td>
<td>8</td>
<td>1 tube of 8 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-12DXXXX</td>
<td>12</td>
<td>1 tube of 12 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-18EXXXX</td>
<td>16</td>
<td>1 tube of 16 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-24LXXXX</td>
<td>24</td>
<td>1 tube of 24 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-48DXXXX</td>
<td>48</td>
<td>4 tubes of 12 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-72DXXXX</td>
<td>72</td>
<td>6 tubes of 12 fibers</td>
</tr>
</tbody>
</table>

Use first (X) to specify fiber type: 6 = OM1 62.5/125µm, 5 = OM2 50/125µm

Use second (X) to specify cable rating: 1 = Riser OFNR, 2 = Plenum OFNP, 3 = LSOH

Use (XXX) to specify length in kilometer. Use 4 characters including decimal point

**XGLO: Multimode 50/125 OM3 and OM4 (Aqua Jacket), Singlemode 0S1/0S2 (Yellow Jacket)**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Fiber Count</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>9F(X)B(X)-2FXXXX</td>
<td>2</td>
<td>1 tube of 2 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-4AXXXX</td>
<td>4</td>
<td>1 tube of 4 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-4BXXXX</td>
<td>6</td>
<td>1 tube of 6 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-8CXXXX</td>
<td>8</td>
<td>1 tube of 8 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-12DXXXX</td>
<td>12</td>
<td>1 tube of 12 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-18EXXXX</td>
<td>16</td>
<td>1 tube of 16 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-24LXXXX</td>
<td>24</td>
<td>1 tube of 24 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-48DXXXX</td>
<td>48</td>
<td>4 tubes of 12 fibers</td>
</tr>
<tr>
<td>9F(X)B(X)-72DXXXX</td>
<td>72</td>
<td>6 tubes of 12 fibers</td>
</tr>
</tbody>
</table>

Use (XX) to specify fiber type: 5L = OM3 50/125µm Laser Optimized, 5V = OM4 50/125µm Laser Optimized, 8L = OS1/OS2 Singlemode

Use (X) to specify cable rating: 1 = Riser OFNR, 2 = Plenum OFNP, 3 = LSOH

Use (XXX) to specify length in kilometer. Use 4 characters including decimal point

**Standards Compliance**

- IEEE 802.3ab 2004 (1000BASE-LX)
- IEEE 802.3ab 2004 (1000BASE-SX)
- IEEE 802.3ae (10GBASE-LX)

### Applications Support

- **Distances (m)**
  - 100BASE-SX (150 m)
  - 100BASE-LX (1300 m)
  - 10GBASE-SX (700 m)

- **Distances (nm)**
  - 850 nm (100BASE-SX)
  - 1300 nm (100BASE-LX)

### HIGHLIGHTS

- 900µm tight buffer
- 250µm coated optical fiber
- Length markings in 0.6m (2 ft.) increments
- Color code per TIA-568-C

### Identification

- **Material:**
  - Jacket (Aqua)
  - Color-coded fibers
  - Color-coded buffer tubes

Siemon fiber optic cables are ideal for data centers, campus and building backbones. Siemon fiber optic cables are offered in XGLO and LightSystem configurations supporting high-speed applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.
XGLO® & LightSystem® Indoor Tight Buffer (International)

LightSystem® Gigabit Ethernet Fiber Optic Cable

Minimum Performance Parameters for LightSystem 62.5/125μm & 50/125μm Multimode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Wavelength (nm)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Minimum Modal Bandwidth (MHz·km)</th>
<th>Guaranteed Gigabit Transmission Distance (Meters)</th>
<th>Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>62.5/125 (OM1)</td>
<td>850</td>
<td>3.5</td>
<td>200</td>
<td>275</td>
<td>1.495</td>
</tr>
<tr>
<td></td>
<td>1300</td>
<td>1.0</td>
<td>500</td>
<td>550</td>
<td>1.490</td>
</tr>
<tr>
<td>50/125 (OM2)</td>
<td>850</td>
<td>3.5</td>
<td>500</td>
<td>550</td>
<td>1.483</td>
</tr>
<tr>
<td></td>
<td>1300</td>
<td>1.0</td>
<td>500</td>
<td>550</td>
<td>1.479</td>
</tr>
</tbody>
</table>

*The protocol pertinent to the transmission distance as noted is Gigabit Ethernet per IEEE 802.3:2005.

Minimum Performance Parameters for XGLO 50/125μm Multimode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Guaranteed Gigabit Transmission Distance (m)</th>
<th>Guaranteed 10 Gigabit Transmission Distance (m)</th>
<th>Minimum Bandwidth (MHz·km)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Group Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>50/125 (OM3)</td>
<td>1000</td>
<td>600</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>50/125 (OM4)</td>
<td>1100</td>
<td>600</td>
<td>550</td>
<td>300</td>
<td>300</td>
</tr>
</tbody>
</table>

Minimum Performance Parameters for XGLO Singlemode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Wavelength (nm)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Zero Dispersion Wavelength (nm)</th>
<th>Zero Dispersion Slope (nm·km)</th>
<th>Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singlemode (OS1/OS2)</td>
<td>1310</td>
<td>≤0.40</td>
<td>1312 ± 10</td>
<td>≤0.003</td>
<td>1.468</td>
</tr>
<tr>
<td></td>
<td>1550</td>
<td>≤0.40</td>
<td>1312 ± 10</td>
<td>≤0.003</td>
<td>1.468</td>
</tr>
<tr>
<td></td>
<td>1300 - 1324</td>
<td>≤0.30</td>
<td>1312 ± 10</td>
<td>≤0.003</td>
<td>1.468</td>
</tr>
</tbody>
</table>

XGLO and LightSystem Indoor Tight Buffer Physical Specifications

PHYSICAL SPECIFICATIONS (All Values Are Nominal)

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Nominal Cable Diameter mm</th>
<th>Maximum Pulling Tension Newtons</th>
<th>Nominal Net Weight kg/km</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Installation</td>
<td>Long Term</td>
<td>Installation</td>
</tr>
<tr>
<td></td>
<td>OFNR/LSOH/OFNP</td>
<td>OFNR/LSOH</td>
<td>OFNP</td>
</tr>
<tr>
<td>2</td>
<td>4.8</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>4</td>
<td>4.8</td>
<td>660</td>
<td>440</td>
</tr>
<tr>
<td>6</td>
<td>4.8</td>
<td>660</td>
<td>440</td>
</tr>
<tr>
<td>8</td>
<td>5.8</td>
<td>900</td>
<td>560</td>
</tr>
<tr>
<td>12</td>
<td>5.8</td>
<td>900</td>
<td>560</td>
</tr>
<tr>
<td>16</td>
<td>7.8</td>
<td>1320</td>
<td>660</td>
</tr>
<tr>
<td>24</td>
<td>8.8</td>
<td>1320</td>
<td>660</td>
</tr>
<tr>
<td>48</td>
<td>10.0</td>
<td>2700</td>
<td>1000</td>
</tr>
<tr>
<td>72</td>
<td>19.6</td>
<td>2700</td>
<td>1000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Maximum Crush Resistance (N/mm)</th>
<th>Maximum Crush Resistance (N/mm)</th>
<th>Operating Temperature °C</th>
<th>Storage Temperature °C</th>
<th>Minimum Bend Radius</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Installation</td>
<td>Long Term</td>
<td>Installation</td>
<td>Long Term</td>
<td></td>
</tr>
<tr>
<td>2-24</td>
<td>22</td>
<td>25/100</td>
<td>-20 to 70</td>
<td>-40 to 70</td>
<td>15 x DIA.</td>
</tr>
<tr>
<td>48-72</td>
<td>22</td>
<td>25/100</td>
<td>-20 to 70</td>
<td>-40 to 70</td>
<td>20 x DIA.</td>
</tr>
</tbody>
</table>

Custom lengths and jacket colors are available upon request. Contact our Customer Service Department for more information. XGLO® and LightSystem® are trademarks of Siemon.
XGLO® & LightSystem® Indoor Tight Buffer
Distribution (North America)

Siemon indoor tight buffer cables are ideal for data centers, campus and building backbones. Siemon fiber optic cables are offered in XGLO and LightSystem configurations supporting high-speed, applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.

Ordering Information
LightSystem Multimode 62.5/125 OM1, 50/125 OM2 (Orange Jacket)
XGLO Multimode Laser Optimized 50/125 OM3, OM4 (Aqua Jacket), Singlemode OS1/OS2 (Yellow Jacket)

<table>
<thead>
<tr>
<th>Part #</th>
<th>Fiber Count</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>9BB(X)(X)002B-XXXXXXA</td>
<td>2</td>
<td>1 tube of 2 fibers</td>
</tr>
<tr>
<td>9BB(X)(X)002AC-XXXXXXA</td>
<td>4</td>
<td>1 tube of 4 fibers</td>
</tr>
<tr>
<td>9BB(X)(X)006B-XXXXXXA</td>
<td>6</td>
<td>1 tube of 6 fibers</td>
</tr>
<tr>
<td>9BB(X)(X)008W-XXXXXXA</td>
<td>8</td>
<td>1 tube of 8 fibers</td>
</tr>
<tr>
<td>9BB(X)(X)0102D-XXXXXXA</td>
<td>12</td>
<td>1 tube of 12 fibers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part #</th>
<th>Fiber Count</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>9BB(X)(X)018C-XXXXXXA</td>
<td>16</td>
<td>4 tubes of 4 fibers</td>
</tr>
<tr>
<td>9BB(X)(X)024L-XXXXXXA</td>
<td>24</td>
<td>1 tube of 24 fibers</td>
</tr>
<tr>
<td>9BB(X)(X)0360D-XXXXXXA</td>
<td>36</td>
<td>6 tubes of 6 fibers</td>
</tr>
<tr>
<td>9BB(X)(X)048B-XXXXXXA</td>
<td>48</td>
<td>4 tubes of 12 fibers</td>
</tr>
<tr>
<td>9BB(X)(X)072G-XXXXXXA</td>
<td>72</td>
<td>6 tubes of 12 fibers</td>
</tr>
</tbody>
</table>

Use 1st (X) to specify fiber type: 6 = 62.5/125um, 5 = 50/125um, 8 = Singlemode OS1/OS2
Use 2nd (X) to specify fiber jacket type: P=Riser OFNR, F= Plenum OFNP
Use (XXXX) to specify typical performance: G109 = OM1 62.5µm, T109 = OM2 50µm, T121 = OM3 50µm Laser Optimized, T152 = OM4 50µm Laser Optimized, E205 = OS1/OS2 Singlemode
Note: Contact Siemon Customer Service for cables available in fixed reel lengths. (unit of measure) F=feet

HIGHLIGHTS
- 900µm tight buffer
- 250µm coated optical fiber
- Length markings in 2 ft. increments
- Color code Per TIA-598-C

APPLICATIONS SUPPORT
- Telcordia GR-409-CORE
- ANSI/TIA-492AAAD
- ANSI/TIA/EIA-568-C.3
- ISO/IEC 11801:2002 Amendment 2 OM4
- ISO/IEC 11801:2002 OM3

APPLICATIONS SUPPORT
- LightSystem Multimode Laser Optimized 50/125 OM3, OM4 (Aqua Jacket), Singlemode OS1/OS2 (Yellow Jacket)

<table>
<thead>
<tr>
<th>APPLICATION</th>
<th>DISTANCE (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10GBASE-SX (850 nm)</td>
<td>300</td>
</tr>
<tr>
<td>10GBASE-LX (1300 nm)</td>
<td>1000</td>
</tr>
<tr>
<td>100BASE-SX (850 nm)</td>
<td>1000</td>
</tr>
<tr>
<td>100BASE-LX (1300 nm)</td>
<td>600</td>
</tr>
<tr>
<td>1000BASE-SX (850 nm)</td>
<td>1500</td>
</tr>
<tr>
<td>1000BASE-LX (1300 nm)</td>
<td>2000</td>
</tr>
<tr>
<td>10G Fibre Channel (WDM-1310 nm)</td>
<td>7000</td>
</tr>
<tr>
<td>10G Fibre Channel (WDM-1310 nm)</td>
<td>3000</td>
</tr>
<tr>
<td>10G Fibre Channel (WDM-1310 nm)</td>
<td>5000</td>
</tr>
<tr>
<td>10G Fibre Channel (WDM-1310 nm)</td>
<td>7000</td>
</tr>
</tbody>
</table>

XGLO 500 Multimode, 50/125, OM4

<table>
<thead>
<tr>
<th>APPLICATION</th>
<th>DISTANCE (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10GBASE-SX (850 nm)</td>
<td>550</td>
</tr>
<tr>
<td>10GBASE-LX (1300 nm)</td>
<td>1000</td>
</tr>
<tr>
<td>1000BASE-SX (850 nm)</td>
<td>1100</td>
</tr>
<tr>
<td>1000BASE-LX (1300 nm)</td>
<td>1500</td>
</tr>
<tr>
<td>10G Fibre Channel (WDM-1310 nm)</td>
<td>5000</td>
</tr>
<tr>
<td>10G Fibre Channel (WDM-1310 nm)</td>
<td>7000</td>
</tr>
<tr>
<td>10G Fibre Channel (WDM-1310 nm)</td>
<td>9000</td>
</tr>
<tr>
<td>10G Fibre Channel (WDM-1310 nm)</td>
<td>11000</td>
</tr>
</tbody>
</table>

XGLO Singlemode, OS1/OS2

<table>
<thead>
<tr>
<th>APPLICATION</th>
<th>DISTANCE (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10GBASE-SX (850 nm)</td>
<td>8000</td>
</tr>
<tr>
<td>10GBASE-LX (1550 nm)</td>
<td>30000</td>
</tr>
<tr>
<td>10G Fibre Channel (WDM-1310 nm)</td>
<td>10000</td>
</tr>
<tr>
<td>10G Fibre Channel (WDM-1310 nm)</td>
<td>50000</td>
</tr>
</tbody>
</table>

Note: Contact Siemon Customer Service for cables available in fixed reel lengths. (unit of measure) F=feet

www.siemon.com
LightSystem® Gigabit Ethernet Fiber Optic Distribution Cable (North America)

**Minimum Performance Parameters for LightSystem 50/125µm & 62.5/125µm Multimode Fiber**

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Wavelength (nm)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Minimum Modal Bandwidth (MHz*km)</th>
<th>Guaranteed Gigabit Transmission Distance (Meters)</th>
<th>Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>50/125µm</td>
<td>850</td>
<td>3.5</td>
<td>200</td>
<td>275</td>
<td>1.495</td>
</tr>
<tr>
<td></td>
<td>1300</td>
<td>1.0</td>
<td>500</td>
<td>550</td>
<td>1.490</td>
</tr>
<tr>
<td>62.5/125µm</td>
<td>850</td>
<td>3.5</td>
<td>500</td>
<td>550</td>
<td>1.483</td>
</tr>
<tr>
<td></td>
<td>1300</td>
<td>1.0</td>
<td>500</td>
<td>550</td>
<td>1.479</td>
</tr>
</tbody>
</table>

*The protocol pertinent to the transmission distance as noted is Gigabit Ethernet per IEEE 802.3.2005.*

**XGLO® 10 Gigabit Ethernet Fiber Optic Cable (North America)**

**Minimum Performance Parameters for XGLO 50/125µm Multimode Fiber**

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Guaranteed Gigabit Transmission Distance (m)</th>
<th>Guaranteed 10 Gigabit Transmission Distance (m)</th>
<th>Minimum Bandwidth (MHz*km)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Group Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>50/125µm</td>
<td>1000</td>
<td>600</td>
<td>300</td>
<td>3.0</td>
<td>RML - 2000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>300</td>
<td>1.0</td>
<td>OFL - 500</td>
</tr>
<tr>
<td>50/125µm</td>
<td>1100</td>
<td>600</td>
<td>550</td>
<td>3.0</td>
<td>RML - 4000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>550</td>
<td>1.0</td>
<td>OFL - 500</td>
</tr>
</tbody>
</table>

**Minimum Performance Parameters for XGLO Singlemode Fiber**

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Wavelength (nm)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Zero Dispersion Wavelength (nm)</th>
<th>Zero Dispersion Slope (nm²-km)</th>
<th>Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singlemode</td>
<td>1310</td>
<td>0.50</td>
<td>1312 ± 10</td>
<td>≤0.093</td>
<td>1.468</td>
</tr>
<tr>
<td></td>
<td>1550</td>
<td>0.50</td>
<td>1312 ± 10</td>
<td>≤0.093</td>
<td>1.468</td>
</tr>
<tr>
<td>1300-1324</td>
<td>-0.40</td>
<td>≤1312 ± 10</td>
<td>≤0.093</td>
<td>1.468</td>
<td></td>
</tr>
</tbody>
</table>

**XGLO and LightSystem Physical Specifications**

**PHYSICAL SPECIFICATIONS (All Values Are Nominal)**

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Nominal Cable Diameter (mm)</th>
<th>Maximum Pulling Tension Newtons (lb)</th>
<th>Maximum Net Weight kg/km (lbs/1000 ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OFNR/OFNP</td>
<td>OFNR</td>
<td>OFNP</td>
</tr>
<tr>
<td>2</td>
<td>4.8 (0.19)</td>
<td>400 (90)</td>
<td>400 (90)</td>
</tr>
<tr>
<td>4</td>
<td>4.8 (0.19)</td>
<td>640 (148)</td>
<td>440 (99)</td>
</tr>
<tr>
<td>6</td>
<td>4.8 (0.19)</td>
<td>640 (148)</td>
<td>440 (99)</td>
</tr>
<tr>
<td>8</td>
<td>5.0 (0.23)</td>
<td>900 (202)</td>
<td>560 (126)</td>
</tr>
<tr>
<td>12</td>
<td>5.0 (0.23)</td>
<td>900 (202)</td>
<td>560 (126)</td>
</tr>
<tr>
<td>16</td>
<td>13.0 (0.54)</td>
<td>1320 (297)</td>
<td>660 (146)</td>
</tr>
<tr>
<td>24</td>
<td>8.0 (0.35)</td>
<td>1282 (288)</td>
<td>642 (144)</td>
</tr>
<tr>
<td>36</td>
<td>16.5 (0.85)</td>
<td>1320 (297)</td>
<td>660 (146)</td>
</tr>
<tr>
<td>48</td>
<td>16.0 (0.63)</td>
<td>2700 (607)</td>
<td>1000 (225)</td>
</tr>
<tr>
<td>72</td>
<td>19.6 (0.77)</td>
<td>2700 (607)</td>
<td>1000 (225)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Minimum Crush Resistance (N/mm²)</th>
<th>Minimum Flex Resistance Cycles</th>
<th>Operating Temperature °C (°F)</th>
<th>Installation Temperature °C (°F)</th>
<th>Storage Temperature °C (°F)</th>
<th>Minimum Bend Radius</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OFNR/OFNP</td>
<td>OFNR</td>
<td>OFNP</td>
<td>Installation</td>
<td>Long Term</td>
<td></td>
</tr>
<tr>
<td>2-24</td>
<td>22</td>
<td>25/100</td>
<td>-20 to 50 (-4 to 122)</td>
<td>0 to 60 (+32 -140)</td>
<td>-40 to 60 (-40 -140)</td>
<td>15 x DI.A.</td>
</tr>
<tr>
<td>36-72</td>
<td>22</td>
<td>25/100</td>
<td>-20 to 50 (-4 to 122)</td>
<td>0 to 60 (+32 -140)</td>
<td>-40 to 60 (-40 -140)</td>
<td>20 x DI.A.</td>
</tr>
</tbody>
</table>

www.siemon.com
XGLO® & LightSystem® Interlocking Aluminum Armor Indoor Tight Buffer Fiber Cable (Global)

Siemon interlocking aluminum armor indoor tight buffer fiber cables are ideal for data centers, campus and building backbones as well as industrial applications. The interlocking armor cable is a robust aluminum armor design that provides higher compression crush strength, rodent resistance and increased security. Siemon interlocking armor fiber cables may be installed as an alternative to traditional fiber cables in plenum inner duct or conduit, providing a less expensive single-pull solution with estimated savings of 25-50% in materials and estimated labor savings up to 60%. Siemon fiber optic cables are offered in LightSystem and XGLO configurations supporting high-speed applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.

Ordering Information

LightSystem Multimode 62.5/125 OM1, 50/125 OM2 (Orange Jacket), XGLO Multimode Laser Optimized 50/125 OM3, OM4 (Aqua Jacket), Singlemode OS1/OS2 (Yellow Jacket)

<table>
<thead>
<tr>
<th>Part #</th>
<th>Fiber Count</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>9BC000060-XXXX00</td>
<td>6</td>
<td>1 tube of 6 fibers</td>
</tr>
<tr>
<td>9BC000120-XXXX00</td>
<td>12</td>
<td>1 tube of 12 fibers</td>
</tr>
<tr>
<td>9BC000240-XXXX00</td>
<td>24</td>
<td>1 tube of 24 fibers</td>
</tr>
<tr>
<td>9BC000360-XXXX00</td>
<td>36</td>
<td>3 tubes of 12 fibers</td>
</tr>
<tr>
<td>9BC000480-XXXX00</td>
<td>48</td>
<td>4 tubes of 12 fibers</td>
</tr>
<tr>
<td>9BC000720-XXXX00</td>
<td>72</td>
<td>6 tubes of 12 fibers</td>
</tr>
<tr>
<td>9BC000960-XXXX00</td>
<td>96</td>
<td>8 tubes of 12 fibers</td>
</tr>
<tr>
<td>9BC001140-XXXX00</td>
<td>144</td>
<td>12 tubes of 12 fibers</td>
</tr>
</tbody>
</table>

Use 1st (X) to specify fiber type: 6 = 62.5/125µm, 5 = 50/125µm, 8 = Singlemode
Use 2nd (X) to specify cable rating: R = OFCR, P = OFCP
Use (XXXX) to specify class performance: 0109 = OM1 62.5µm, 1109 = OM2 50µm, 7112 = OM3 50µm Laser Optimized, 7152 = OM4 62.5µm Laser Optimized, 6255 = OS1/OS2 Singlemode

Note: Contact Siemon Customer Service for cables available in fixed reel lengths. (unit of measure) F=feet

HIGHLIGHTS
- 50% in tight buffer
- OFCR: Communications Type OFCR Engineering Testing Laboratories (ETL) or Underwriters Laboratories (UL) Type OFCR (Conductive Optical Fiber Plenum Cable) and cETL or UL, OFC-FT6 75C.
- OFCP: Communications Type OFCP Engineering Testing Laboratories (ETL) or Underwriters Laboratories (UL) Type OFCP (Conductive Optical Fiber Plenum Cable) and cETL or UL, OFC-FT6 75C.
- Aluminum interlock offers greater than 10 times the crush resistance of a standard fiber cable
- Provides installation protection from bending and excessive pull tension
- Significant time and labor reductions versus conduit or inner duct installations

XGLO 300 Multimode 50/125, OM3

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM3
- ANSI/TIA-598-C
- ANSI/TIA/EIA-568-C.3

APPLICATIONS SUPPORT
APPLICATION | DISTANCE (m)
-------------|--------------
10GBASE-SX (850 nm) | 21000
50 µ/125m | 875
62.5/125µm | 250
1000BASE-LX (1300 nm) | 5500
1000BASE-LW (1300 nm) | 15000
1000BASE-SX (850 nm) | 3000
1000BASE-LX (1300 nm) | 6000
50 µ/125m | 825
1000BASE-SX (850 nm) | 1500
1000BASE-LX (1300 nm) | 4500
Fibre Channel 266 (1300 nm) | 500
JVM 622 (1300 nm) | 500
JVM 155 (1300 nm) | 3000
JVM 32 (1300 nm) | 3000
FDII (Original 1300 nm) | 2000
1000BASE-FX (1300 nm) | 2000

XGLO 550 Multimode, 50/125, OM4

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM4
- ANSI/TIA-598-C
- ANSI/TIA/EIA-568-C.3
- ISO/IEC 11801:2008 Amendment 2 OM4

APPLICATIONS SUPPORT
APPLICATION | DISTANCE (m)
-------------|--------------
10GBASE-SX (850 nm) | 21000
10GBASE-LX (1300 nm) | 5500
1000BASE-SX (850 nm) | 3000
1000BASE-LX (1300 nm) | 1100
1000BASE-EX (1300 nm) | 600
Fibre Channel 266 (1300 nm) | 500
JVM 622 (1300 nm) | 500
JVM 155 (1300 nm) | 3000
JVM 32 (1300 nm) | 3000
FDII (Original 1300 nm) | 2000
1000BASE-FX (1300 nm) | 2000

XGLO Singlemode, OS1/OS2

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM4
- ANSI/TIA-598-C
- ANSI/TIA/EIA-568-C.3
- ISO/IEC 11801:2008 Amendment 2 OM4

APPLICATIONS SUPPORT
APPLICATION | DISTANCE (m)
-------------|--------------
10GBASE-LX (1300 nm) | 8200
10GBASE-SX (850 nm) | 3000
10GBASE-LX (1300 nm) | 3000
1000BASE-SX (850 nm) | 1100
1000BASE-LX (1300 nm) | 600
Fibre Channel 266 (1300 nm) | 4000
JVM 622 (1300 nm) | 1100
JVM 155 (1300 nm) | 1100
JVM 32 (1300 nm) | 1100
FDII (Original 1300 nm) | 2000
1000BASE-FX (1300 nm) | 2000
**LightSystem® Gigabit Ethernet Fiber Optic Distribution Cable (Global)**

Minimum Performance Parameters for LightSystem 50/125µm & 62.5/125µm Multimode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Wavelength (nm)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Minimum Modal Bandwidth (MHz * km)</th>
<th>Guaranteed Gigabit Transmission Distance (Meters)</th>
<th>Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>50/125 (OM1)</td>
<td>850</td>
<td>3.5</td>
<td>200</td>
<td>275</td>
<td>1.495</td>
</tr>
<tr>
<td></td>
<td>1300</td>
<td>1.0</td>
<td>500</td>
<td>550</td>
<td>1.483</td>
</tr>
<tr>
<td>62.5/125 (OM2)</td>
<td>850</td>
<td>3.5</td>
<td>500</td>
<td>550</td>
<td>1.479</td>
</tr>
<tr>
<td></td>
<td>1300</td>
<td>1.0</td>
<td>500</td>
<td>550</td>
<td></td>
</tr>
</tbody>
</table>

*The protocol pertinent to the transmission distance as noted is Gigabit Ethernet per IEEE 802.3-2005.*

**XGLO® 10 Gigabit Ethernet Fiber Optic Cable (Global)**

Minimum Performance Parameters for XGLO 50/125µm Multimode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Guaranteed Gigabit Transmission Distance (m)</th>
<th>Guaranteed 10 Gigabit Transmission Distance (m)</th>
<th>Minimum Bandwidth (MHz * km)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Group Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>850 nm</td>
<td>1300</td>
<td>850 nm</td>
<td>1300</td>
<td>RML - 2000 OFL - 1500 OFL - 500</td>
<td>3.0</td>
</tr>
<tr>
<td>1300 nm</td>
<td>850 nm</td>
<td>1300 nm</td>
<td>850 nm</td>
<td>OFL - 500</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Minimum Performance Parameters for XGLO Singlenode Fiber**

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Wavelength (nm)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Zero Dispersion Wavelength (nm)</th>
<th>Zero Dispersion Slope (nm²-km)</th>
<th>Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singlenode (OM3/OM2)</td>
<td>1310</td>
<td>0.50</td>
<td>≤0.093</td>
<td>≤0.093</td>
<td>1.468</td>
</tr>
<tr>
<td></td>
<td>1550</td>
<td>0.50</td>
<td>≤0.093</td>
<td>≤0.093</td>
<td>1.468</td>
</tr>
<tr>
<td></td>
<td>1300-1324</td>
<td>≤0.40</td>
<td>1312 ± 10</td>
<td>≤0.093</td>
<td>1.468</td>
</tr>
</tbody>
</table>

**XGLO and LightSystem Physical Specifications (Global)**

### PHYSICAL SPECIFICATIONS (All Values Are Nominal)

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Nominal Cable Diameter (mm)</th>
<th>Maximum Pulling Tension (Newtons)</th>
<th>Maximum = Net Weight (kg/km) (lb/1000 ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OFCR</td>
<td>OFCP</td>
<td>OFCR</td>
</tr>
<tr>
<td>6</td>
<td>15.6 (0.614)</td>
<td>13.1 (0.517)</td>
<td>1335 (300)</td>
</tr>
<tr>
<td>8</td>
<td>15.6 (0.614)</td>
<td>13.3 (0.523)</td>
<td>1335 (300)</td>
</tr>
<tr>
<td>12</td>
<td>19.8 (0.740)</td>
<td>14.8 (0.584)</td>
<td>1780 (400)</td>
</tr>
<tr>
<td>24</td>
<td>24.4 (0.961)</td>
<td>20.9 (0.821)</td>
<td>2640 (600)</td>
</tr>
<tr>
<td>48</td>
<td>24.4 (0.961)</td>
<td>23.4 (0.921)</td>
<td>2640 (600)</td>
</tr>
<tr>
<td>72</td>
<td>32.1 (1.265)</td>
<td>24.7 (0.974)</td>
<td>2640 (600)</td>
</tr>
<tr>
<td>96</td>
<td>32.1 (1.265)</td>
<td>31.1 (1.236)</td>
<td>2640 (600)</td>
</tr>
<tr>
<td>144</td>
<td>32.1 (1.265)</td>
<td>31.1 (1.236)</td>
<td>4445 (1000)</td>
</tr>
</tbody>
</table>

**Fiber Type | Minimum Crush Resistance (N/cm) | Minimum Flex Resistance Cycles | Operating Temperature °C (°F) | Storage Temperature °C (°F) | Minimum Bend Radius**

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Minimum Crush Resistance (N/cm)</th>
<th>Minimum Flex Resistance Cycles</th>
<th>Operating Temperature °C (°F)</th>
<th>Storage Temperature °C (°F)</th>
<th>Minimum Bend Radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFCR</td>
<td>OFCP</td>
<td>OFCR</td>
<td>OFCP</td>
<td>OFCP</td>
<td>Installation Long Term</td>
</tr>
<tr>
<td>6 - 144</td>
<td>440</td>
<td>100 Cycles</td>
<td>-40 to 75 (-40 to 167)</td>
<td>-40 to 85 (-40 to 185)</td>
<td>15 x DIA. 10 x DIA.</td>
</tr>
</tbody>
</table>

Custom lengths and jacket colors are available upon request. Contact our Customer Service Department for more information.
XGLO® & LightSystem® Indoor/Outdoor Tight Buffer (International)

Siemon LSOH (IEC 60332-3) indoor/outdoor tight buffer cables are ideal for data centers, campus and building backbones. Siemon fiber optic cables are offered in XGLO and LightSystem configurations supporting high-speed applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.

Ordering Information

LightSystem Multimode 62.5/125 OM1, Multimode 50/125 OM2, XGLO Multimode 50/125 OM3 and OM4, Singlemode OS1/OS2

<table>
<thead>
<tr>
<th>Part #</th>
<th>Fiber Count</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>9GDXH004C-XXXXXM</td>
<td>4</td>
<td>1 tube of 4 fibers</td>
</tr>
<tr>
<td>9GDXH006D-XXXXXM</td>
<td>6</td>
<td>1 tube of 6 fibers</td>
</tr>
<tr>
<td>9GDXH018E-XXXXXM</td>
<td>8</td>
<td>1 tube of 8 fibers</td>
</tr>
<tr>
<td>9GDXH024L-XXXXXM</td>
<td>12</td>
<td>1 tube of 12 fibers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part #</th>
<th>Fiber Count</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>9GDXH018E-XXXXXM</td>
<td>16</td>
<td>1 tube of 16 fibers</td>
</tr>
<tr>
<td>9GDXH032A-XXXXXM</td>
<td>24</td>
<td>1 tube of 24 fibers</td>
</tr>
<tr>
<td>9GDXH048G-XXXXXM</td>
<td>48</td>
<td>4 tubes of 12 fibers</td>
</tr>
<tr>
<td>9GDXH072G-XXXXXM</td>
<td>72</td>
<td>6 tubes of 12 fibers</td>
</tr>
</tbody>
</table>

Use 1st (X) to specify fiber type: 6 = 62.5/125µm, 5 = 50/125µm, 8 = Singlemode
Use (XXXX) to specify class performance: G101 = OM1 62.5µm, T101 = OM2 50µm, T301 = OM3 50µm Laser Optimized, T501 = OM4 50µm Laser Optimized, E201 = OS1/OS2 Singlemode

M = meters

Note: Contact Siemon Customer Service for cables available in fixed reel lengths.

Jacket (Block)
- Material: LSOH - LSOH Compound
- Armored Yarn
- Water blocking swellable yarn

Identification
- Color-coded fibers and tubes

XGLO 300 Multimode 50/125 OM3
STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM3
- ANSI/TIA-568-C
- ANSI/TIA/EIA-568-C.3

APPLICATIONS SUPPORT
- 10G BASE-S (850 nm) 300
- 10G BASE-LX4 (1300 nm) 300
- 10G BASE-LX (1300 nm) 1000
- 10G BASE-U (1310 nm) 600
- 10G BASE-FX (1330 nm) 2000
- 10G BASE-F (1300 nm) 2000

XGLO 550 Multimode 50/125 OM4
STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM4
- ANSI/TIA-568-C
- ANSI/TIA/EIA-568-C.3

APPLICATIONS SUPPORT
- 10G BASE-S (850 nm) 550
- 10G BASE-LX4 (1300 nm) 300
- 10G BASE-LX (1300 nm) 1100
- 10G BASE-U (1310 nm) 600
- 10G BASE-F (1300 nm) 500
- 10G BASE-FX (1330 nm) 2000
- 10G BASE-F (1300 nm) 2000

XGLO Singlemode, OS1/OS2
STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM3
- ANSI/TIA-568-C
- ANSI/TIA-568-B.3
- ITU-T G.652 C/D
- Telcordia GR-409-CORE
- LSOH IEC 60332-3

APPLICATIONS SUPPORT
- 10G BASE-S (1310 nm) 8000
- 10G BASE-LX4 (1310 nm) 3000
- 10G BASE-LX (1310 nm) 10000
- 10G BASE-U (1310 nm) 10000
- 10G BASE-F (1310 nm) 5000
- 10G BASE-FX (1310 nm) 10000
- 10G BASE-F (1310 nm) 5000
- 10G BASE-FX (1310 nm) 10000

www.siemon.com
XGLO® & LightSystem® Indoor/Outdoor Tight Buffer (International)

LightSystem® Gigabit Ethernet Fiber Optic Cable

Minimum Performance Parameters for LightSystem 62.5/125μm & 50/125μm Multimode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Wavelength (nm)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Minimum Modal Bandwidth (MHz·km)</th>
<th>Guaranteed Gigabit Transmission Distance (Meters)</th>
<th>Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>62.5/125 (OM1)</td>
<td>850</td>
<td>3.5</td>
<td>200</td>
<td>275</td>
<td>1.405</td>
</tr>
<tr>
<td></td>
<td>1300</td>
<td>1.0</td>
<td>500</td>
<td>550</td>
<td>1.490</td>
</tr>
<tr>
<td>50/125 (OM2)</td>
<td>850</td>
<td>3.5</td>
<td>500</td>
<td>550</td>
<td>1.483</td>
</tr>
<tr>
<td></td>
<td>1300</td>
<td>1.0</td>
<td>500</td>
<td>550</td>
<td>1.479</td>
</tr>
</tbody>
</table>

*The protocol pertinent to the transmission distance as noted is Gigabit Ethernet per IEEE 802.3:2005.

Minimum Performance Parameters for XGLO 50/125μm Multimode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Guaranteed Gigabit Transmission Distance (m)</th>
<th>Guaranteed 10 Gigabit Transmission Distance (m)</th>
<th>Minimum Bandwidth (MHz·km)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Group Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>50/125 (OM3)</td>
<td>1000</td>
<td>600</td>
<td>RML - 2000</td>
<td>3.0</td>
<td>1.483</td>
</tr>
<tr>
<td></td>
<td>1300</td>
<td>600</td>
<td>OFL - 1500</td>
<td>1.0</td>
<td>1.479</td>
</tr>
<tr>
<td>50/125 (OM4)</td>
<td>1100</td>
<td>600</td>
<td>RML - 4700</td>
<td>3.0</td>
<td>1.483</td>
</tr>
<tr>
<td></td>
<td>1300</td>
<td>600</td>
<td>OFL - 3500</td>
<td>1.0</td>
<td>1.479</td>
</tr>
</tbody>
</table>

Minimum Performance Parameters for XGLO Singlemode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Wavelength (nm)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Zero Dispersion Wavelength (nm)</th>
<th>Zero Dispersion Slope (nm-µm)</th>
<th>Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singlemode (OS1/OS2)</td>
<td>1310</td>
<td>0.40</td>
<td>1312 ± 10</td>
<td>-0.089</td>
<td>1.468</td>
</tr>
<tr>
<td></td>
<td>1550</td>
<td>0.30</td>
<td>1312 ± 10</td>
<td>-0.089</td>
<td>1.468</td>
</tr>
<tr>
<td></td>
<td>1310 - 1625</td>
<td>&lt;0.40</td>
<td>1312 ± 10</td>
<td>-0.089</td>
<td>1.468</td>
</tr>
</tbody>
</table>

Minimum Performance Parameters for XGLO Singlemode Fiber

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Nominal Cable Diameter (mm)</th>
<th>Maximum Pulling Tension (Newtons)</th>
<th>Nominal Net Weight (kg/km)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Installation</td>
<td>Long Term</td>
</tr>
<tr>
<td>4</td>
<td>5.3</td>
<td>1500</td>
<td>495</td>
</tr>
<tr>
<td>6</td>
<td>5.3</td>
<td>1500</td>
<td>495</td>
</tr>
<tr>
<td>8</td>
<td>5.8</td>
<td>1500</td>
<td>495</td>
</tr>
<tr>
<td>12</td>
<td>6.2</td>
<td>1500</td>
<td>495</td>
</tr>
<tr>
<td>16</td>
<td>7.8</td>
<td>1500</td>
<td>495</td>
</tr>
<tr>
<td>24</td>
<td>8.8</td>
<td>1500</td>
<td>495</td>
</tr>
<tr>
<td>48</td>
<td>16.3</td>
<td>4200</td>
<td>1400</td>
</tr>
<tr>
<td>72</td>
<td>21.9</td>
<td>5400</td>
<td>1800</td>
</tr>
</tbody>
</table>

Minimum Performance Parameters for LightSystem 62.5/125μm & 50/125μm Multimode Fiber

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Maximum Crush Resistance (N/mm²)</th>
<th>Operating Temperature °C</th>
<th>Storage Temperature °C</th>
<th>Minimum Bend Radius (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Installation</td>
</tr>
<tr>
<td>4-12</td>
<td>5</td>
<td>-40 to 70</td>
<td>-40 to 70</td>
<td>20 x DIA.</td>
</tr>
<tr>
<td>16-72</td>
<td>10</td>
<td>-20 to 70</td>
<td>-20 to 70</td>
<td>20 x DIA.</td>
</tr>
</tbody>
</table>

Custom lengths and jacket colors are available upon request. Contact our Customer Service Department for more information. XGLO® and LightSystem® are trademarks of Siemon.
Fiber Count

**Construction**

48 tubes of 12 fibers

6 tubes of 12 fibers

8 tubes of 12 fibers

12 tubes of 12 fibers

1 tube of 6 fibers

4 tubes of 12 fibers

6 tubes of 6 fibers

1 tube of 12 fibers

24

6 tubes of 12 fibers

8 tubes of 12 fibers

12 tubes of 12 fibers

1 tube of 6 fibers

1 tube of 12 fibers

12 tubes of 12 fibers

2 - 12 Strands

16 - 36 Strands

48 - 144 Strands

Ordering Information

**LightSystem Multimode 62.5/125 OM1, Multimode 50/125 OM2, XGLO Multimode 50/125 OM3 and OM4, Singlemode OS1/OS2**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Fiber Count</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>9GIXH0108-00001M</td>
<td>2</td>
<td>1 tube of 2 fibers</td>
</tr>
<tr>
<td>9GIXH0104-00001M</td>
<td>4</td>
<td>1 tube of 4 fibers</td>
</tr>
<tr>
<td>9GIXH01046-00001M</td>
<td>6</td>
<td>1 tube of 6 fibers</td>
</tr>
<tr>
<td>9GIXH0108-00001M</td>
<td>8</td>
<td>1 tube of 8 fibers</td>
</tr>
<tr>
<td>9GIXH01122G-00001M</td>
<td>12</td>
<td>1 tube of 12 fibers</td>
</tr>
<tr>
<td>9GIXH01164G-00001M</td>
<td>16</td>
<td>2 tubes of 6 fibers 1 tube of 4 fibers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part #</th>
<th>Fiber Count</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>9GIXH0108-00004M</td>
<td>24</td>
<td>4 tubes of 6 fibers</td>
</tr>
<tr>
<td>9GIXH0108-00006M</td>
<td>36</td>
<td>6 tubes of 6 fibers</td>
</tr>
<tr>
<td>9GIXH0108-00007M</td>
<td>48</td>
<td>4 tubes of 12 fibers</td>
</tr>
<tr>
<td>9GIXH0108-00008M</td>
<td>72</td>
<td>8 tubes of 12 fibers</td>
</tr>
<tr>
<td>9GIXH0108-00009M</td>
<td>96</td>
<td>6 tubes of 12 fibers</td>
</tr>
<tr>
<td>9GIXH0108-00010M</td>
<td>144</td>
<td>12 tubes of 12 fibers</td>
</tr>
</tbody>
</table>

Use 1st (X) to specify fiber type: 6 = 62.5/125µm, 5 = 50/125µm, 8 = Singlemode

Use (XXX) to specify class performance: G101 = OM1 62.5µm, T101 = OM2 50µm, T301 = OM3 50µm Laser Optimized, T501 = OM4 50µm Laser Optimized, E201 = OS1/OS2 Singlemode

STANDARDS COMPLIANCE

- ISO/IEC 11801:2002 OM1
- ANSI/TIA-568-C
- ANSI/TIA/EIA-568-C.3
- IEC 60332-1-2 (Single strand)
- IEC 60754-2 (Acid gas)
- IEC 60332-3 (Ripcord)
- IEC 60793-2-10 Fibre Type A1a.3
- ANSI/TIA-492 AAAD
- ANSI/TIA-492 AAAC
- ANSI/TIA-492 AAAB
- ANSI/TIA-492 AAAC
- ANSI/TIA-492 AAAB

Note: Contact Siemon Customer Service for cables available in fixed reel lengths.

**Applications Support**

- 10GBASE-S (850 nm) 2,000
- 10GBASE-LX (1300 nm) 5,000
- 10GBASE-S (1300 nm) 5,000
- 10GBASE-S (1550 nm) 5,000
- 10GBASE-LX (1550 nm) 5,000
- 10GBASE-LX (1300 nm) 5,000
- 10GBASE-LX (1550 nm) 5,000
- 10GBASE-LX (1300 nm) 5,000
- 10GBASE-LX (1550 nm) 5,000
- 10GBASE-LX (1300 nm) 5,000
- 10GBASE-LX (1550 nm) 5,000
- 10GBASE-LX (1300 nm) 5,000
- 10GBASE-LX (1550 nm) 5,000
- 10GBASE-LX (1300 nm) 5,000
- 10GBASE-LX (1550 nm) 5,000
- 10GBASE-LX (1300 nm) 5,000
- 10GBASE-LX (1550 nm) 5,000
**XGLO® & LightSystem® Indoor/Outdoor LooseTube (International)**

**LightSystem® Gigabit Ethernet Fiber Optic Cable**

Minimum Performance Parameters for LightSystem 62.5/125μm & 50/125μm Multimode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Wavelength (nm)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Minimum Modal Bandwidth (MHz·km)</th>
<th>Guaranteed Gigabit Transmission Distance (Meters)</th>
<th>Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>62.5/125 (OM1)</td>
<td>850</td>
<td>3.5</td>
<td>200</td>
<td>275</td>
<td>1.495</td>
</tr>
<tr>
<td>1300</td>
<td>3.5</td>
<td>500</td>
<td>500</td>
<td>1.490</td>
<td></td>
</tr>
<tr>
<td>50/125 (OM2)</td>
<td>850</td>
<td>3.5</td>
<td>500</td>
<td>500</td>
<td>1.483</td>
</tr>
<tr>
<td>1300</td>
<td>1.0</td>
<td>500</td>
<td>500</td>
<td>1.479</td>
<td></td>
</tr>
</tbody>
</table>

*The protocol pertinent to the transmission distance as noted is Gigabit Ethernet per IEEE 802.3:2005.

Minimum Performance Parameters for XGLO 50/125μm Multimode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Wavelength (nm)</th>
<th>Guaranteed Gigabit Transmission Distance (m)</th>
<th>Guaranteed 10 Gigabit Transmission Distance (m)</th>
<th>Minimum Bandwidth (MHz·km)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Group Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>50/125 (OM3)</td>
<td>850</td>
<td>RML - 2000</td>
<td>OFL - 1500</td>
<td>3.0</td>
<td>1.0</td>
<td>1.483</td>
</tr>
<tr>
<td>1300</td>
<td>2000</td>
<td>1500</td>
<td>3.0</td>
<td>1.0</td>
<td>1.479</td>
<td></td>
</tr>
<tr>
<td>50/125 (OM4)</td>
<td>1100</td>
<td>RML - 4700</td>
<td>OFL - 3500</td>
<td>3.0</td>
<td>1.0</td>
<td>1.483</td>
</tr>
<tr>
<td>1300</td>
<td>4700</td>
<td>3500</td>
<td>3.0</td>
<td>1.0</td>
<td>1.479</td>
<td></td>
</tr>
</tbody>
</table>

Minimum Performance Parameters for XGLO Singlemode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Wavelength (nm)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Zero Dispersion Wavelength (nm)</th>
<th>Zero Dispersion Slope (ns·km/nm)</th>
<th>Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singlemode (OS1/OS2)</td>
<td>1310</td>
<td>0.40</td>
<td>1312 ± 10</td>
<td>0.089</td>
<td>1.468</td>
</tr>
<tr>
<td>1550</td>
<td>0.30</td>
<td>1312 ± 10</td>
<td>0.089</td>
<td>1.468</td>
<td></td>
</tr>
<tr>
<td>1310 - 1625</td>
<td>0.40</td>
<td>1312 ± 10</td>
<td>0.089</td>
<td>1.468</td>
<td></td>
</tr>
</tbody>
</table>

XGLO and LightSystem Indoor/Outdoor LooseTube Physical Specifications

**PHYSICAL SPECIFICATIONS (All Values Are Nominal)**

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Nominal Cable Diameter mm</th>
<th>Installation Maximum Pulling Tension Newtons</th>
<th>Long Term</th>
<th>Nominal Net Weight kg/k</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>7.7</td>
<td>1000</td>
<td>500</td>
<td>67</td>
</tr>
<tr>
<td>4</td>
<td>7.7</td>
<td>1000</td>
<td>500</td>
<td>67</td>
</tr>
<tr>
<td>6</td>
<td>7.7</td>
<td>1000</td>
<td>500</td>
<td>67</td>
</tr>
<tr>
<td>8</td>
<td>7.7</td>
<td>1000</td>
<td>500</td>
<td>67</td>
</tr>
<tr>
<td>12</td>
<td>10.1</td>
<td>1800</td>
<td>1200</td>
<td>103</td>
</tr>
<tr>
<td>16</td>
<td>10.1</td>
<td>1800</td>
<td>1200</td>
<td>103</td>
</tr>
<tr>
<td>24</td>
<td>10.1</td>
<td>1800</td>
<td>1200</td>
<td>103</td>
</tr>
<tr>
<td>36</td>
<td>10.1</td>
<td>1800</td>
<td>1200</td>
<td>103</td>
</tr>
<tr>
<td>48</td>
<td>10.8</td>
<td>1800</td>
<td>1200</td>
<td>115</td>
</tr>
<tr>
<td>72</td>
<td>10.8</td>
<td>1800</td>
<td>1200</td>
<td>115</td>
</tr>
<tr>
<td>96</td>
<td>12.0</td>
<td>1800</td>
<td>1200</td>
<td>139</td>
</tr>
<tr>
<td>144</td>
<td>12.0</td>
<td>1800</td>
<td>1200</td>
<td>139</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Maximum Crush Resistance (N/mm)</th>
<th>Operating Temperature °C</th>
<th>Storage Temperature °C</th>
<th>Installation Minimum Bend Radius</th>
<th>Long Term Minimum Bend Radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-12</td>
<td>10</td>
<td>-40 to 60</td>
<td>-40 to 60</td>
<td>20 x DIA.</td>
<td>10 x DIA.</td>
</tr>
<tr>
<td>16-144</td>
<td>22</td>
<td>-40 to 60</td>
<td>-40 to 60</td>
<td>20 x DIA.</td>
<td>10 x DIA.</td>
</tr>
</tbody>
</table>

Custom lengths and jacket colors are available upon request. Contact our Customer Service Department for more information.

XGLO® and LightSystem® are trademarks of Siemon.
Siemon outside plant (OSP) fiber optic cables are ideal for campus, building-to-building interconnections, lashed aerial, duct or underground conduits. These cables are designed to tolerate the installation and stresses in cables exposed to the external environment. Siemon fiber optic cables are offered in XGLO and LightSystem configurations supporting high-speed applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fiber Channel.

### Ordering Information

**LightSystem: Multimode 62.5/125 OM1, Multimode 50/125 OM2, XGLO OM3 and OM4 Multimode 50/125, Singlemode OS1/OS2**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Fiber Count</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>9F00X(X)(X)4-2F00XXXX</td>
<td>2</td>
<td>1 tube of 2 fibers</td>
</tr>
<tr>
<td>9F00X(X)(X)4-4A00XXXX</td>
<td>4</td>
<td>1 tube of 4 fibers</td>
</tr>
<tr>
<td>9F00X(X)(X)4-4B00XXXX</td>
<td>6</td>
<td>1 tube of 6 fibers</td>
</tr>
<tr>
<td>9F00X(X)(X)4-4C00XXXX</td>
<td>8</td>
<td>1 tube of 8 fibers</td>
</tr>
<tr>
<td>9F00X(X)(X)4-12D00XXXX</td>
<td>12</td>
<td>1 tube of 12 fibers</td>
</tr>
<tr>
<td>9F00X(X)(X)4-16A00XXXX</td>
<td>16</td>
<td>2 tubes of 8 fibers</td>
</tr>
</tbody>
</table>

Use 1st (XX) to specify fiber type: D = OM1 62.5/125um, S = OM2 50/125um Laser Optimized, B = OS2 Singlemode

Use (X) to specify Non-Armor or Armor: D = Non Armor, E = Armor

Use (XXX) to specify length in kilometer. Use 4 characters including decimal point.

### Construction/Features

- Outer jacket is a UV resistant black MDPE (Medium Density Polyethylene)
- Water blocking, gel-filled loose tubes
- Non-Armor and Armor versions
- Armor version utilizes a robust corrugated steel armor
- No central strength member for 2-12 strands
- Central strength member for 16-144 strands

### Standards Compliance

- ISO/IEC 11801:2002 OM3
- ISO/IEC 11801:2002 OM2
- ISO/IEC 11801:2002 OM1
- ISO/IEC 11801:2002 Amendment 2 OM4

### Applications Support

**XGLO 300 OM3 Multimode 50/125**

<table>
<thead>
<tr>
<th>Application</th>
<th>Distance (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100BASE-S (850 nm)</td>
<td>N/A</td>
</tr>
<tr>
<td>50/125um</td>
<td>82</td>
</tr>
<tr>
<td>62.5/125um</td>
<td>26</td>
</tr>
<tr>
<td>1000BASE-S (850 nm)</td>
<td>N/A</td>
</tr>
<tr>
<td>50/125um</td>
<td>550</td>
</tr>
<tr>
<td>62.5/125um</td>
<td>275</td>
</tr>
<tr>
<td>1000BASE-LX (1300 nm)</td>
<td>550</td>
</tr>
<tr>
<td>Fiber Channel 26/4 (1300 nm)</td>
<td>1,500</td>
</tr>
<tr>
<td>ATM 622 (1300 nm)</td>
<td>500</td>
</tr>
<tr>
<td>ATM 155 (1300 nm)</td>
<td>2,000</td>
</tr>
<tr>
<td>ATM 5 (1300 nm)</td>
<td>3,000</td>
</tr>
<tr>
<td>FDDI (Original 1300 nm)</td>
<td>2,000</td>
</tr>
<tr>
<td>100BASE-FX (1300 nm)</td>
<td>2,000</td>
</tr>
</tbody>
</table>

**XGLO 550 OM4 Multimode 50/125**

<table>
<thead>
<tr>
<th>Application</th>
<th>Distance (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100BASE-S (850 nm)</td>
<td>550</td>
</tr>
<tr>
<td>100BASE-LX (1300 nm)</td>
<td>300</td>
</tr>
<tr>
<td>1000BASE-S (850 nm)</td>
<td>1,000</td>
</tr>
<tr>
<td>1000BASE-LX (1300 nm)</td>
<td>600</td>
</tr>
<tr>
<td>Fiber Channel 26/4 (1300 nm)</td>
<td>1,500</td>
</tr>
<tr>
<td>ATM 622 (1300 nm)</td>
<td>500</td>
</tr>
<tr>
<td>ATM 155 (1300 nm)</td>
<td>2,000</td>
</tr>
<tr>
<td>ATM 5 (1300 nm)</td>
<td>3,000</td>
</tr>
<tr>
<td>FDDI (Original 1300 nm)</td>
<td>2,000</td>
</tr>
<tr>
<td>100BASE-FX (1300 nm)</td>
<td>2,000</td>
</tr>
</tbody>
</table>

**XGLO OS1/OS2 Singlemode**

**Standards Compliance**

- ISO/IEC 11801 Ed 2 Amendment 1 2008
- ANSI/TIA/EIA-568-C.2-1
- ANSI/TIA-568-C
- ITU-T G.652 C/D
- Telcordia GR-409-CORE

**Applications Support**

- 100BASE-S-L (1310 nm) | 8,000 |
- 100BASE-S-E (1550 nm) | 30,000 |
- 10GBASE-LX (1310 nm) | 10,000 |
- 10GBASE-CX (1300 nm) | 5,000 |
- 100GBASE-LX (1310 nm) | 10,000 |
- 1000BASE-CX (1300 nm) | 10,000 |
- 10GBASE-LX (1310 nm) | 10,000 |
- 100GBASE-CX (1300 nm) | 15,000 |

**Material:** MDPE - Jacket (Black)

- Applied longitudinally under cable jacket

**Color Coded Fiber and Tubes**

**Corrugated Steel Tape**

- **Jacket (Black):**
  - Material: MDPE - Medium Density Polyethylene
  - Cablecore Gel
  - Polyester Top
  - FRP Stength Member
  - Aramid Yarn
  - Rip Cord
  - Gel Filled Buffer Tubes

**Non-Armor**

**Armor**

These cables provide a degree of rodent protection effective in many cases. The non-armored cable has a PE sheath which has a hard surface and provides a degree of rodent protection because it is disagreeable and unpleasant for most rodents to gnaw on. The armor cable has a PE sheath and corrugated steel tape which provides 100% rodent protection.
**XGLO® & LightSystem® Outside Plant Loose Tube (International)**

**LightSystem® Gigabit Ethernet Fiber Optic Cable**

Minimum Performance Parameters for LightSystem 62.5/125µm & 50/125µm Multimode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Wavelength (nm)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Minimum Modal Bandwidth (MHz.km)</th>
<th>Guaranteed Gigabit Transmission Distance (Meters)</th>
<th>Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>62.5/125 (OM1)</td>
<td>850</td>
<td>3.5</td>
<td>200</td>
<td>275</td>
<td>1.495</td>
</tr>
<tr>
<td>1300</td>
<td>1.0</td>
<td>500</td>
<td>550</td>
<td>1.490</td>
<td></td>
</tr>
<tr>
<td>50/125 (OM2)</td>
<td>850</td>
<td>3.5</td>
<td>500</td>
<td>550</td>
<td>1.483</td>
</tr>
<tr>
<td>1300</td>
<td>1.0</td>
<td>500</td>
<td>550</td>
<td>1.479</td>
<td></td>
</tr>
</tbody>
</table>

*The protocol pertinent to the transmission distance as noted is Gigabit Ethernet per IEEE 802.3:2005.*

Minimum Performance Parameters for XGLO 50/125µm Multimode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Guaranteed Gigabit Transmission Distance (m)</th>
<th>Guaranteed 10 Gigabit Transmission Distance (m)</th>
<th>Minimum Bandwidth (MHz.km)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Group Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>50/125 (OM3)</td>
<td>1000</td>
<td>600</td>
<td>300</td>
<td>300</td>
<td>RML - 2000</td>
</tr>
<tr>
<td>50/125 (OM4)</td>
<td>1100</td>
<td>600</td>
<td>550</td>
<td>300</td>
<td>RML - 4700</td>
</tr>
</tbody>
</table>

Minimum Performance Parameters for XGLO Singlemode Fiber

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Wavelength (nm)</th>
<th>Maximum Attenuation (dB/km)</th>
<th>Zero Dispersion Wavelength (nm)</th>
<th>Zero Dispersion Slope (nm².km)</th>
<th>Index of Refraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singlemode (OS1/OS2)</td>
<td>1310</td>
<td>0.40</td>
<td>1312 ± 10</td>
<td>≤0.089</td>
<td>1.466</td>
</tr>
<tr>
<td>1550</td>
<td>0.30</td>
<td>1312 ± 10</td>
<td>≤0.089</td>
<td>1.466</td>
<td></td>
</tr>
<tr>
<td>1310 - 1625</td>
<td>≤0.40</td>
<td>1312 ± 10</td>
<td>≤0.089</td>
<td>1.466</td>
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</tr>
</tbody>
</table>

**XGLO and LightSystem Outside Plant-Loose Tube Physical Specifications**

**PHYSICAL SPECIFICATIONS (All Values Are Nominal)**

| Fiber Count | Nominal Cable Diameter (mm) | Installation Maximum Pulling Tension Newtons | Long Term Maximum Pulling Tension Newtons | Maximum Net Weight kg/km Non Armor Armor Non Armor Armor Non Armor Armor |
|------------|-----------------------------|---------------------------------------------|------------------------------------------|--------------------------|--------------------------|--------------------------|
| 2 - 144    |                             |                                             |                                          |                          |                          |                          |
| 2          | 8.5                         | 10.7                                       | 2700                                      | 450                      | 810                      | 55 109                   |
| 4          | 8.5                         | 10.7                                       | 2700                                      | 450                      | 810                      | 55 109                   |
| 6          | 8.5                         | 10.7                                       | 2700                                      | 450                      | 810                      | 55 109                   |
| 8          | 8.5                         | 10.7                                       | 2700                                      | 450                      | 810                      | 55 109                   |
| 12         | 8.5                         | 10.7                                       | 2700                                      | 450                      | 810                      | 55 109                   |
| 16         | 11.0                        | 10.8                                       | 2700                                      | 450                      | 810                      | 99 116                   |
| 24         | 11.0                        | 11.4                                       | 2700                                      | 450                      | 810                      | 97 131                   |
| 36         | 11.2                        | 12.3                                       | 2700                                      | 450                      | 810                      | 100 152                  |
| 48         | 11.2                        | 12.3                                       | 2700                                      | 450                      | 810                      | 100 152                  |
| 72         | 11.2                        | 12.3                                       | 2700                                      | 450                      | 810                      | 100 152                  |
| 96         | 12.7                        | 13.8                                       | 2700                                      | 450                      | 810                      | 126 186                  |
| 144        | 15.7                        | 16.8                                       | 2700                                      | 450                      | 810                      | 189 263                  |

<table>
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<tr>
<th>Fiber Type</th>
<th>Minimum Crush Resistance</th>
<th>Operating Temperature °C</th>
<th>Storage Temperature °C</th>
<th>Minimum Bend Radius</th>
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<td>2 - 144</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non Armor</td>
<td>1000</td>
<td>-30 to 60</td>
<td>-40 to 70</td>
<td>20 x DIA.</td>
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<tr>
<td>Armor</td>
<td>1100</td>
<td></td>
<td></td>
<td>10 x DIA.</td>
</tr>
</tbody>
</table>

Custom lengths are available upon request. Contact our Customer Service Department for more information.

XGLO® and LightSystem® are trademarks of Siemon
MapIT® G2
Infrastructure Management

Take your network management to the next level. The MapIT G2 system integrates a powerful combination of innovative Smart Patch Panels, user-friendly Master Control Panels and Siemon’s EagleEye™ Connect software to provide real-time tracking and reporting of network-wide physical layer activity. The system continuously monitors your network — 24/7, by increasing physical layer security by tracking changes in device connectivity, detecting potential security threats such as unauthorized connections and devices, providing instant alerts and reducing downtime. All such activity is automatically updated in the system database, ensuring 100% accuracy of your infrastructure documentation. With these advantages in documentation, security, uptime and asset management, most customers see ROI in less than 2 years.

Available in:

- Flat and Angled Copper Smart Patch Panels (SPP) Options — Angled panels eliminate the need for horizontal cable managers, greatly improving patching density
- MapIT G2 Category 7A TERA system integrates automated infrastructure management with the highest performing and most secure twisted pair cabling system
- Standard Fiber and MTP Plug and Play Smart Enclosures — Providing a standard and angled panel option. Angled panels eliminate the need for horizontal cable managers, greatly improving patching density
- Siemon’s Innovative MapIT G2 Interconnect Module — Enables direct monitoring of patching to network switches

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MapIT G2 Interconnect Module ........................... 7.3
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MapIT® G2
Master and Distribution Control Panels

The MapIT G2 Master Control Panel (MCP) collects all network infrastructure data provided by the Smart Patch Panels and Fiber Enclosures, monitoring up to 2880 ports in just 1 rack mount space (1U). The MCP and DCP features an integrated LCD display and keypad, which provide technicians access to critical network architecture and diagnostic information. By providing this interactive interface locally within the patching zone, the MapIT G2 system virtually eliminates the need for technicians to carry PDAs or directly access the software server. This user interface allows full end-to-end graphic circuit traces for any channel in the system and can perform diagnostic tasks on any component or port.

Superior Density —
Low profile 1U design increases density and reduces usage of costly rack and cabinet space in data centers and telecommunication rooms

Reduced Power Consumption —
78% lower power consumption compared to traditional intelligent patching systems for monitoring equipment. This power savings decreases operating expenses and provides a more environmentally friendly solution

Excellent Thermal Efficiency —
The MCP and DCP's combination of ultra low heat generation and a low profile design helps to maximise cooling efficiency in data center environments

Simple, Multi-Functional User Interface —
Large graphic LCD and keypad enables technicians to view circuit traces, patch cord traces, perform work orders, diagnostics and more, improving efficiency in maintenance and MAC work

Ease of Implementation —
Simple design and straightforward implementation and setup reduces the time and technician skill required to design and install the system
MapIT® G2
Master and Distribution Control Panels

Ordering Information:

M-MCP ........................................... MapIT Master Control Panel, 1U, black*
M-DCP ........................................... MapIT Distribution Control Panel, 1U, black*

*Includes mounting hardware (1) probe pen, (1) power supply with adapters for various regions, rear cable manager, cable ties, S310 stuffer caps and ground lug
Note: 1U = 44.5mm

Optional Accessories

Second Power Supply
M-PS ........................................... 6.0V, 3.0A power supply for MCP or DCP

Replacement Probe Pen
M-PEN ........................................... MapIT pen probe, 7.82m (25 ft.) cord

Category 5e Shielded Cable for Control Connections
9A5M4-E2 ...................................... PVC (CM, IEC 60332-1), Gray Jacket, 305m (1000 ft.) Reel-in-Box
9A5L4-E2 ...................................... LS0H (IEC 60332-1), Violet Jacket, 305m (1000 ft.) Reel-in-Box

PS-8-8 Shielded RJ45 Plugs
PS-8-8 ........................................... 8-position shielded modular plug with 8 contacts

S110® Patch Plugs
S110P4 ........................................... 4-pair, field-terminated S110 patch plug (colored icons not included)
LL-05 ........................................... LockIT™ Outlet Lock, bag of 10, includes 1 LockIT Universal Key
LKEY-05 ...................................... LockIT Universal Key, bag of 10
LL-LC-05 ...................................... LockIT LC Adapter Lock, bag of 10, includes 1 LockIT Universal Key

EagleEye™ Connect Software

Siemon's EagleEye Connect software manages, monitors and documents your network infrastructure through Siemon's MapIT G2 connectivity. For more information on EagleEye Connect software, including features, capabilities and system requirements, please visit www.siemon.com/eagleeve.
MapIT® G2 Interconnect Solution

The MapIT G2 interconnect solution enables tracking of direct MapIT G2 connectivity between a switch and a single Smart Patch Panel (SPP) — without the need for an additional SPP required in a cross-connect configuration. The interconnect topology (see diagram below) can increase rack density, cut installation costs and reduce installation time. Compatible with existing Siemon MapIT G2 copper connectivity, simply use the Interconnect Module (M-ICM) to unlock the design flexibility of an interconnect topology.

Deployment is simple - just plug a MapIT G2 patch cord into the switch and plug the other end into the Interconnect Module, which discovers the switch port and relays the information to the MapIT G2 system. Then, remove the cord from the module, plug it into the SPP and the link is detected.

**Reduced Costs** —
The interconnect solution requires half the number of patch panels versus an intelligent cross connect installation, cutting both material and installation labor costs.

**Faster Deployment** —
By reducing the number of patch panels and associated connectivity, installation and testing time is dramatically reduced.

**Increased Density** —
As the interconnect topology uses half the number of patch panels versus cross-connect, cabinet/rack density is greatly improved. For even greater density, use the angled version of Siemon’s SPP.

**User-Friendly Module** —
Simple, single-button functionality combined with on-board LCD display that provides technicians with clear instructions and status information allows intelligent links to be deployed in seconds.

MapIT G2 Interconnect Module

The MapIT G2 Interconnect Module is used to create a link between the switch and Smart Patch Panel port connections during initial installation or during moves, adds and changes.
MapIT® G2 Category 7A TERA® System

The MapIT G2 TERA system combines two best-in-class systems into one. The MapIT G2 Automated Infrastructure Management (AIM) system is now available in a fully shielded TERA solution. TERA, already the highest performing and most secure twisted pair cabling system, now features MapIT G2 technology built into the category 7A/classFA patch panels and cords. This combination of intelligent TERA hardware and Siemon EagleEye™ Connect software delivers real-time tracking and management of network-wide physical layer activity and IT assets. This benchmark AIM solution offers users a truly unparalleled level of performance, security and control.

- **Robust** — Lightweight, high strength steel with black finish integrates outlet retention and cable management. Panel includes Quick-Ground technology for shielded systems.
- **Green** — MapIT G2 uses 78% less power than competing systems.
- **Installation Friendly** — Individual outlets snap into panel from the front or rear. Angled panel design allows patch cords to be routed directly to vertical cable managers.
- **Compact** — Off-set pogo pin position optimized for high density stacked applications.
- **Quality** — Plug contacts and sensor pins feature 50 microns of gold plating for long-term reliability and resistance to corrosion.
- **Smart** — Panel intelligence tracks patch cord connections and drives LCD/LEDs for technician guidance.
- **Fully Shielded** — S/FTP construction provides 1000 MHz bandwidth per pair.
- **Mapping** — Sensor pin is accessible at the rear of the boot for test and mapping purposes.
- **Flexible** — A variety of TERA 4-pair and 2-pair to RJ45 patch cords allow easy connection to any RJ45 equipped active electronics.
- **Trace and display patch cord connections on the patch panel LCD.**
- **A complete circuit trace can be viewed on-screen at the MCP or DCP.**
- **TERA supports cable sharing allowing multiple 2-pair applications to run over one 4-pair cable and outlet, saving significant material and pathway space.**
Ordering Information:

MapIT® G2 TERA® Patch Panel
M-SPPA-T24K . . . . . . . . . . . . . MapIT G2 TERA Panel, 24 Ports, Angled Black, 1RMS, Sold with TERA Outlets
M-SPPA-T24-01K . . . . . . . . . . . . MapIT G2 Ready TERA Panel, 24 Ports, Angled Black, 1RMS, Sold with TERA Outlets

MapIT G2 TERA Patch Cords - 4 Pair
M-T4-(XX)(M-B)(XX)L . . . . . . . . TERA-TERA Cable Assembly, Ivory Jacket, Colored Boot, LSOH

<table>
<thead>
<tr>
<th>Cord Length</th>
<th>Boot Color</th>
</tr>
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<tbody>
<tr>
<td>01 = 1m (3 ft.)</td>
<td>01 = Black</td>
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<tr>
<td>02 = 2m (6 ft.)</td>
<td>02 = White</td>
</tr>
<tr>
<td>03 = 3m (9 ft.)</td>
<td>03 = Red</td>
</tr>
<tr>
<td>04 = 5m (16 ft.)</td>
<td>04 = Grey</td>
</tr>
<tr>
<td>06 = Blue</td>
<td>06 = Blue</td>
</tr>
</tbody>
</table>

MapIT G2 TERA Patch Cords - 2 Pair
M-T2E2-(XX)(M-B)(XX)L . . . . . . . . TERA to 5e Screened RJ45 Cable Assembly, Ivory Jacket, Colored Boot, LSOH

<table>
<thead>
<tr>
<th>Cord Length</th>
<th>Boot Color</th>
</tr>
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<tbody>
<tr>
<td>01 = 1m (3 ft.)</td>
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</tr>
<tr>
<td>04 = 5m (16 ft.)</td>
<td>04 = Grey</td>
</tr>
<tr>
<td>06 = Blue</td>
<td>06 = Blue</td>
</tr>
</tbody>
</table>

Optional Accessories

Category 5e Shielded Cable for Bus (Control Cable) Connections
9A5R4-E1-(XX)-R1A . . . . . . . . . . Riser, 305 m (1000 ft), Reel (North America)
9A5R4-E2 . . . . . . . . . . . . . . . . Riser, Blue, 305m (1000 ft), Reel-in-box

Modular Plug for Bus Connections
PS-8-8 . . . . . . . . . . . . . . . . 8-position shielded modular plug with 8 contacts

Ready Panel Upgrade to MapIT G2
M-SPPA-PCBA-24 . . . . . . . . . . . . MapIT G2 TERA panel upgrade kit, PCB

For more information on MapIT G2, TERA and EagleEye®, please visit their respective product pages at www.siemon.com

MapIT, TERA and EagleEye are registered trademarks of The Siemon Company
MapIT® G2 Category 6A and Category 6 Systems

Smart Patch Panel
The MapIT G2 Smart Patch Panel (SPP) is an industry first in automated infrastructure management. The panel features on-board intelligence and a combination of LEDs and a backlit LCD to guide technicians. The LCD can be used to display patch cord trace and connectivity diagnostic information. It can also be used to troubleshoot network issues, which can drastically reduce downtime and increase productivity. Also, since it is actively connected to your database, the LCD could be used as a virtual label, dynamically displaying panel and port information directly from Siemon EagleEye™ Connect software.

MapIT G2 Patch Cords
These advanced cords also feature a 9th wire and sensor pin contained in a robust over-molded boot. This embedded sensor technology enables tracking of connections between Smart Patch Panel ports.
Ordering Information:

MapIT® G2 Smart Patch Panel
M-SPP(X)-K24ENS ..................MapIT G2 24-port modular Smart Patch Panel, accepts Siemon shielded and unshielded Z-MAX® Keystone outlets or unshielded MAX® keystone outlets (sold separately)
Includes mounting hardware, labels, (24) cable ties and panel ground lug

MapIT G2-Ready Patch Panel
M-SPP(X)-K24E-001 ..................MapIT G2-Ready 24-port modular Patch Panel, accepts Siemon shielded and unshielded Z-MAX Keystone outlets or unshielded MAX keystone outlets (sold separately)
Includes mounting hardware, labels, (24) cable ties and panel ground lug
M-SPP(X)-PCBA-24 .................MapIT G2 Upgrade Kit for MapIT G2 Ready Patch Panels. (Upgrade kit includes PCB with built-in sensor pads, LED's and LCD display, new front panel cover, additional mounting hardware & components with instructions), Siemon EagleEye™ Connect software sold separately

Use (X) to specify panel type: Blank = Flat, A = Angled

Optional Accessories
Siemon Keystone Outlets
Z6A-SK(XX) ......................Keystone shielded Z-MAX 6A outlet
Z6A-K(XX) ......................Keystone unshielded Z-MAX 6A outlet
Z6-K(XX) ......................Keystone unshielded Z-MAX 6 outlet
MX6-K01 ......................Keystone unshielded MAX 6 outlet, black

Use (XX) to specify color:
01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green, 09 = orange, 20 = ivory, 25 = bright white, 80 = light ivory

Ordering Information:

MapIT® G2 Patch Cords
M-10GMC-(XX)M(XX)L ...........MapIT G2 Category 6A shielded, double-ended, stranded modular cord, color-matching boot, T568A/B, LSZH

Length
01 = 1m (3 ft)
02 = 2m (6 ft)
03 = 3m (10 ft)
05 = 5m (16 ft)

Jacket Color
02 = White
04 = Gray
06 = Blue

M-MC6-(XX)-(XX) .................MapIT G2 Category 6 UTP, double-ended, stranded modular cord, color-matching boot, T568A/B, CMG

Length
03 = 0.91m (3 ft)
05 = 1.52m (5 ft)
07 = 2.13m (7 ft)
10 = 3.05m (10 ft)
15 = 4.57m (15 ft)
20 = 6.10m (20 ft)

Jacket Color
02 = White
04 = Gray
06 = Blue

M-10GMC-(XX)-(XX) ............MapIT G2 Category 6A UTP, double-ended, stranded modular cord, color-matching boot, T568A/B, CMG

Length
03 = 0.91m (3 ft)
05 = 1.52m (5 ft)
07 = 2.13m (7 ft)
10 = 3.05m (10 ft)
15 = 4.57m (15 ft)
20 = 6.10m (20 ft)

Jacket Color
02 = White
04 = Gray
06 = Blue

www.siemon.com
MapIT® G2 Smart Fiber Systems

The MapIT G2 Smart Fiber Enclosures are an industry first in automated infrastructure management. Available in both MTP-to-LC Plug and Play and LC-to-LC field terminated versions, the enclosures feature on panel intelligence and a combination of LEDs and a backlit LCD to guide technicians. The LCD can be used to display patch cord trace and connectivity diagnostic information. It can also be used to troubleshoot network issues, which can drastically reduce downtime and increase productivity. Also, since it is actively connected to your database, you could even use it as a virtual label, dynamically displaying panel and port information directly from the Siemon’s EagleEye™ Connect software.

- **High Performance** — Available in OM4 and OS1/OS2 MTP Plug and Play versions as well as Multimode and Singlemode LC field-terminated connectivity
- **Smart** — On panel intelligence tracks fiber jumper connections and drives LCD/LEDs for tech guidance
- **Green** — MapIT G2 uses up to 76% less power than competing systems and run cool for reduced heat generation
- **High Density** — Up to 48 fibers in a single 1U space
- **Scalable** — MapIT G2 Smart Enclosures can support systems ranging from small, two enclosure remote sites to large 1000+ panel data centers
- **Plug and Play** — Multi-fiber MTP connectivity provides ultra-fast deployment in mission-critical data centers
- **High Accessibility** — MTP Plug and Play versions feature sliding drawer for easy access to connectivity
- **Fiber Management** — MTP Plug and Play versions feature integrated fiber managers for secure jumper routing
MapIT® G2 Smart Fiber Enclosures

MTP-to-LC Plug and Play Fiber Enclosure - SMTP

M-SMTP-LCSM48NS ................. MapIT G2 LC 48-fiber MTP-to-LC Smart Fiber Enclosure, black, multimode, OM4
  Includes 2 MTP adapters, 24 duplex MM, LC blue adapters, cable ties, panel ground lug, fiber management clips, front management bar, label holder and labels

M-SMTP-LCSM48NS ................. MapIT G2 LC 48-fiber MTP-to-LC Smart Fiber Enclosure, black, singlemode, OS1/OS2
  Includes 2 MTP adapters, 24 duplex SM, LC blue adapters, cable ties, panel ground lug, fiber management clips, front management bar, label holder and labels

LC-to-LC Fiber Enclosure - SFE

M-SFE-LC48-01 ...................... MapIT G2 LC 48-fiber Smart Fiber Enclosure, black, multimode OM3/OM4
  Includes 24 duplex MM, LC aqua adapters, cable ties, panel ground lug, fiber management clips, label holder and labels

LC-to-LC Fiber Enclosure

M-SFE-LC48-01 ...................... MapIT G2-Ready LC 48-fiber Smart Fiber Enclosure, black, multimode OM3/OM4
  Includes 24 duplex MM, LC aqua adapters, cable ties, panel ground lug, fiber management clips, label holder and labels

M-SFE-LC48-01C ..................... MapIT G2-Ready LC 48-fiber Smart Fiber Enclosure, black, singlemode OM3/OM4
  Includes 24 duplex SM, LC blue adapters, cable ties, panel ground lug, fiber management clips, label holder and labels

MapIT G2-Ready Fiber Enclosures

MTP-to-LC Plug and Play Fiber Enclosure

M-MTP-LCSM48 ...................... MapIT G2-Ready MTP-to-LC Enclosure, black, multimode, OM4
  Includes 2 MTP adapters, 24 duplex MM/LC aqua adapters, cable ties, panel ground lug, fiber management clips, front management bar, label holder and labels

LC-to-LC Fiber Enclosure

M-LE-LC48-01 ...................... MapIT G2-Ready LC 48-fiber Fiber Enclosure, black, multimode OM3/OM4
  Includes 24 duplex LC aqua adapters, cable ties, panel ground lug, fiber management clips, label holder and labels

Upgrade Kit for MapIT G2-Ready Fiber Enclosures

M-SFE-PCBA-24 ..................... MapIT G2 upgrade kit for MapIT G2-ready fiber enclosure
  (Upgrade kit includes PCB with built-in sensor pads, LED’s and LCD display, new front panel cover, additional mounting hardware and components with instructions, Siemon EagleEye™ Connect software sold separately)

*Singlemode available, contact Customer Service for more information
MapIT® G2 Fiber Systems

MapIT G2 XGLO® Jumpers

MapIT G2 XGLO jumpers are built to be the best. These assemblies are constructed with premium fiber that meets IEEE, IEC and TIA specifications for 10 Gigabit Ethernet serial transmission. These advanced cords feature patented MapIT sensor technology — gold-plated sensor pins retained in robust molded connector clips. These jumpers enable tracking of port connections between MapIT G2 fiber enclosures and LAN equipment.

- **XGLO Laser Bandwidth Optimized Cable** — Reduces impurities in the core of fiber, ensuring robust 10 Gigabit Ethernet transmission.
- **Reliable Integrated Sensor Connections** — 1 sensor pin and copper wire per each duplex connector tracks connectivity status.
- **High Quality, High Performance Connectors** — Jumpers exceed ISO/IEC and TIA requirements for aging, exposure to humidity, temperature extremes, impact, vibration, coupling strength, and cable resistance to stress and strain.

### Ordering Information

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Length</th>
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<tbody>
<tr>
<td>5L = OM3</td>
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</tr>
<tr>
<td>5V = OM4</td>
<td>03 = 3m (10 ft)</td>
</tr>
<tr>
<td></td>
<td>05 = 5m (16 ft)</td>
</tr>
</tbody>
</table>

MapIT G2 XGLO Multimode Duplex Jumpers:

- M-J2-LCLC(XX)-(XX) — LC-LC duplex jumper, MapIT G2 XGLO 50/125 laser optimized Multimode fiber, aqua jacket

<table>
<thead>
<tr>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 = 1m (3 ft)</td>
</tr>
<tr>
<td>03 = 3m (10 ft)</td>
</tr>
<tr>
<td>05 = 5m (16 ft)</td>
</tr>
</tbody>
</table>

MapIT G2 XGLO Singlemode Duplex Jumpers:

- M-J2-LCULCUL-(XX) — LC-LC duplex jumper, MapIT G2 XGLO OS1/OS2 Singlemode fiber, yellow jacket

<table>
<thead>
<tr>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>03 = 3m (10 ft)</td>
</tr>
<tr>
<td>05 = 5m (16 ft)</td>
</tr>
</tbody>
</table>
Faceplates, Mounting Boxes and Accessories

Siemon’s line of faceplates and mounting accessories provide cabling professionals with an extensive list of unique, problem solving options for deploying network connectivity exactly where it is needed.

In addition to the many MAX® and CT® faceplate options, surface-mount boxes, modular furniture adapters and more, please be certain to check out this comprehensive range of flexible options.

- **Universal Modular Furniture Adapter** — Adapts to securely mount network connectivity in nearly any modular furniture system, eliminating the need for separate, furniture-specific adapters.
- **5-SQUARE® Telecom Box** — Offers 50% more cable management space than traditional boxes to support larger-diameter, high-performance cabling.

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LockIT™ Secure Connectivity System

The LockIT solution is comprised of two primary elements: the RJ45 Outlet/LC Adapter Lock and the Secure Patch Cord. The Lock protects a RJ45 copper outlet or LC fiber adapter from the insertion of cords or foreign objects. The Secure RJ45 Patch Cord deters unintended or unauthorized disconnection of the cord. Each of these components requires the LockIT universal key for removal, but may be freely inserted into an outlet to secure the connection. All LockIT components are brightly colored in yellow to easily identify secured connectivity.

The LockIT products are compatible with any standards compliant RJ45 outlet, or LC fiber port. This versatile system can be used in a variety of applications. This flexibility makes LockIT a perfect choice for use in public areas such as schools, retail stores, banks, airports and waiting areas. LockIT is also an ideal solution to protect mission-critical networks such as data centers, health care environments and government systems.
Outlet/ Module Locks

LockIT Outlet Lock:
LL-05 .......................................... LockIT Outlet Lock, bag of 10, includes 1 LockIT Universal Key

LockIT LC Module Lock:
LL-LC-05 ...................................... LockIT LC Adapter Lock, bag of 10, includes 1 LockIT Universal Key

LockIT Universal Key:
LKEY-05 ...................................... LockIT Universal Key, bag of 10

Secure Category 6A Shielded Patchcords

Shielded Category 6A, double ended, 4-pair, stranded LockIT secure patchcord, T568A/B, color matching jacket/boot, LSOH/CM

<table>
<thead>
<tr>
<th>Cord Length</th>
<th>Cord Color</th>
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<tbody>
<tr>
<td>01 = 1m (3 ft.)</td>
<td>01 = Black</td>
</tr>
<tr>
<td>1.5 = 1.5m (4.5 ft.)</td>
<td>02 = White</td>
</tr>
<tr>
<td>02 = 2m (6 ft.)</td>
<td>03 = Red</td>
</tr>
<tr>
<td>03 = 3m (9 ft.)</td>
<td>04 = Grey</td>
</tr>
<tr>
<td>04 = 4m (12 ft.)</td>
<td>05 = Yellow</td>
</tr>
<tr>
<td>05 = 5m (15 ft.)</td>
<td>06 = Blue</td>
</tr>
<tr>
<td>07 = Green</td>
<td></td>
</tr>
</tbody>
</table>

Secure Category 6A UTP Patchcords

UTP Category 6A, double ended, 4-pair, stranded LockIT secure patchcord, T568A/B, color matching jacket/boot, CMG

<table>
<thead>
<tr>
<th>Cord Length</th>
<th>Cord Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 = 1m (3 ft.)</td>
<td>01 = Black</td>
</tr>
<tr>
<td>02 = 1.5m (4.5 ft.)</td>
<td>02 = White</td>
</tr>
<tr>
<td>03 = 2m (6 ft.)</td>
<td>03 = Red</td>
</tr>
<tr>
<td>04 = 2.5m (8 ft.)</td>
<td>04 = Grey</td>
</tr>
<tr>
<td>05 = 3m (9 ft.)</td>
<td>05 = Yellow</td>
</tr>
<tr>
<td>06 = 3.5m (11.5 ft.)</td>
<td>06 = Blue</td>
</tr>
<tr>
<td>07 = Green</td>
<td></td>
</tr>
</tbody>
</table>

Secure Category 6 Patchcords

UTP Category 6A, double ended, 4-pair, stranded LockIT secure patchcord, T568A/B, color matching jacket/boot, LSOH/CM

<table>
<thead>
<tr>
<th>Cord Length</th>
<th>Cord Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>03 = 0.9m (3 ft.)</td>
<td>01 = Black</td>
</tr>
<tr>
<td>05 = 1.5m (5 ft.)</td>
<td>02 = White</td>
</tr>
<tr>
<td>07 = 2.1m (7 ft.)</td>
<td>03 = Red</td>
</tr>
<tr>
<td>10 = 2.3m (7.5 ft.)</td>
<td>04 = Grey</td>
</tr>
<tr>
<td>15 = 4.6m (15 ft.)</td>
<td>05 = Yellow</td>
</tr>
<tr>
<td>20 = 5.1m (16.5 ft.)</td>
<td>06 = Blue</td>
</tr>
<tr>
<td>07 = Green</td>
<td></td>
</tr>
</tbody>
</table>

www.siemon.com
MAX® Faceplates

The MAX faceplates combine high density with aesthetics providing a fresh look to match today’s office decor. The faceplates are designed to be used with angled or flat MAX modules, hybrid Z-MAX® outlets or TERA® outlets.

Quick Identification — Color-coded icons allow users to instantly identify different types of devices or applications

Variety — Faceplates available in black, white, gray, ivory, light ivory, and stainless steel

Superior Density
Fits up to 6 outlets in a single gang or 12 in a double gang faceplate.

Installation Flexibility
MAX or Z-MAX modules can be installed from front or rear of faceplate.

Labels — Sheets of designation labels can be ordered for use with standard printers

Labeling
Faceplates include pressure-release designation label covers for quick, tool-less removal.

10G MAX Faceplates

10G MAX Faceplates are required for Z-MAX 6A UTP installations. Isolated port spacing ensures proper Alien Crosstalk performance. Faceplates include designation labels, clear label covers, and mounting screws.

10GMX-FP(XXX)-(XX)

<table>
<thead>
<tr>
<th>No. of MAX Modules</th>
<th>Faceplate Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>S02 = Two (Single Gang)</td>
<td>01 = Black</td>
</tr>
<tr>
<td>S04 = Four (Single Gang)</td>
<td>02 = White</td>
</tr>
<tr>
<td>D06 = Six (Double Gang)</td>
<td>20 = Ivory</td>
</tr>
<tr>
<td>D08 = Eight (Double Gang)</td>
<td>80 = Light Ivory</td>
</tr>
</tbody>
</table>

Add “B” to end of part number for bulk project pack of 100 faceplates.

www.siemon.com
MAX® Faceplates

Faceplates include designation labels, clear label covers, and mounting screws.

**MAX® Faceplates**

Faceplates include designation labels, clear label covers, and mounting screws.

**MX-FP-S-(XX)-(XX)..... Single Gang**

<table>
<thead>
<tr>
<th>Parts</th>
<th>Faceplate Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 = 1 Port</td>
<td>01 = Black</td>
</tr>
<tr>
<td>02 = 2 Port</td>
<td>02 = White</td>
</tr>
<tr>
<td>03 = 3 Port</td>
<td>04 = Gray</td>
</tr>
<tr>
<td>04 = 4 Port</td>
<td>20 = Ivory</td>
</tr>
<tr>
<td>06 = 6 Port</td>
<td>80 = Light ivory</td>
</tr>
</tbody>
</table>

**MX-FP-D-(XX)-(XX)..... Double Gang**

<table>
<thead>
<tr>
<th>Parts</th>
<th>Faceplate Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>06 = 6 Port</td>
<td>01 = Black</td>
</tr>
<tr>
<td>08 = 8 Port</td>
<td>02 = White</td>
</tr>
<tr>
<td>12 = 12 Port</td>
<td>04 = Gray</td>
</tr>
<tr>
<td>01 = 1 Port</td>
<td>20 = Ivory</td>
</tr>
<tr>
<td>02 = 2 Port</td>
<td>80 = Light ivory</td>
</tr>
</tbody>
</table>

Add “B” to end of part number for bulk project pack of 100 faceplates.
*Black and gray color options and bulk project packs available for single gang faceplates only.

**MAX Stainless Steel Faceplates**

Single and double gang stainless steel MAX faceplates for use with flat and angled MAX modules. Brushed finish on plates mask minor scratches and scuffs that may occur during day-to-day usage.

**MX-FP-S-(XX)-SS-(X)..... Single Gang**

<table>
<thead>
<tr>
<th>Parts</th>
<th>Label Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 = 1 Port</td>
<td>L = Label Holder</td>
</tr>
<tr>
<td>02 = 2 Port</td>
<td>Blank = No Labels or Holder</td>
</tr>
<tr>
<td>03 = 3 Port</td>
<td></td>
</tr>
<tr>
<td>04 = 4 Port</td>
<td></td>
</tr>
<tr>
<td>06 = 6 Port</td>
<td></td>
</tr>
</tbody>
</table>

**MX-FP-D-(XX)-SS-(X)..... Double Gang**

<table>
<thead>
<tr>
<th>Parts</th>
<th>Label Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>06 = 6 Port</td>
<td>L = Label Holder</td>
</tr>
<tr>
<td>08 = 8 Port</td>
<td>Blank = No Labels or Holder</td>
</tr>
<tr>
<td>12 = 12 Port</td>
<td></td>
</tr>
</tbody>
</table>

**Ports**

01 = 1 Port
02 = 2 Port
03 = 3 Port
04 = 4 Port
06 = 6 Port
08 = 8 Port
12 = 12 Port

10G MAX® Horizontal Faceplates

Siemon’s 10G single gang horizontal faceplate for Z-MAX®, TERA or MAX modules

10GMX-HFP-(XX)(XX)

<table>
<thead>
<tr>
<th>Ports</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 = 2 Port</td>
<td>02 = White</td>
</tr>
<tr>
<td>03 = 3 Port</td>
<td>20 = Ivory</td>
</tr>
<tr>
<td>04 = 4 Port</td>
<td>80 = Light Ivory</td>
</tr>
</tbody>
</table>

Add “B” to end of part number for bulk project pack of 100 faceplates.

MAX Horizontal Faceplates

Siemon’s single gang horizontal faceplate for Z-MAX, TERA or MAX modules

MX-HFP-(XX)(XX)

<table>
<thead>
<tr>
<th>Ports</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 = 1 Port</td>
<td>02 = White</td>
</tr>
<tr>
<td>02 = 2 Port</td>
<td>20 = Ivory</td>
</tr>
<tr>
<td>03 = 3 Port</td>
<td>80 = Light Ivory</td>
</tr>
<tr>
<td>04 = 4 Port</td>
<td>---------</td>
</tr>
</tbody>
</table>

Note: Screws, designation label and clear label cover included.

Z-MAX Icon Cards

All Cards include:
- Red and blue icons with voice and data symbols
- Supplemental/color-matched icon with voice, data, and blank designation
- 1 white blank icon for field designation
- Fully recyclable material

Z-ICON-(XX)(XX) . . . . . . . . . . . Z-MAX Icon Card, bag of 100

<table>
<thead>
<tr>
<th>Primary Color</th>
<th>01 = Black</th>
<th>02 = White</th>
<th>03 = Red</th>
<th>04 = Gray</th>
<th>05 = Yellow</th>
<th>06 = Blue</th>
<th>07 = Green</th>
<th>09 = Orange</th>
<th>20 = Ivory</th>
<th>80 = Light Ivory</th>
</tr>
</thead>
</table>

MAX and CT Icons

CT-ICON-(XX) . . . . . . . . . . . 25 colored icon tabs (phone on one side, computer on reverse)
MAX® Duplex and Designer® Faceplates

The MAX Duplex and Designer faceplates are designed for use with Siemon’s MAX series mounting frames. They are ideal for today’s small office, home office, or residential environment. Faceplates include designation labels and color-matching label covers for circuit identification.

MAX Mounting Frames

Siemon’s MAX mounting frames provide a solution for installing MAX or Z-MAX® outlets in an environment where electrical Duplex or Designer style faceplates are desired. They are compatible with any Duplex or Designer style faceplate. The mounting ears can also be detached and used as spacers between the frames and mounting boxes.

Duplex Mounting Frames

MX-E2F-(XX) . . . . . . . Duplex mounting frame, accepts two flat MAX or Z-MAX outlets
MX-E2A-(XX) . . . . . . . Duplex mounting frame, accepts two angled MAX or Z-MAX outlets
MX-E4F-(XX) . . . . . . . Duplex mounting frame, accepts four flat MAX or Z-MAX outlets
MX-E4A-(XX) . . . . . . . Duplex mounting frame, accepts four angled MAX outlets
MX-D4F-15-(XX) . . . . . 4-port MAX mounting frame with HD15 female-female adapter installed
MX-D4F-15E-(XX) . . . . 4-port MAX mounting frame, HD15 cut-out, empty
MX-D4Z-(XX) . . . . . . . Designer mounting frame, accepts four MAX or Z-MAX outlets
MX-D8F-(XX) . . . . . . . Designer mounting frame, accepts six flat MAX or Z-MAX outlets

Designer Mounting Frames

MX-D1Z-(XX) . . . . . . . Designer mounting frame, accepts one MAX or Z-MAX outlets
MX-D2Z-(XX) . . . . . . . Designer mounting frame, accepts two MAX or Z-MAX outlets
MX-D4Z-(XX) . . . . . . . Designer mounting frame, accepts four MAX or Z-MAX outlets

Wall Phone Faceplates

WPJP . . . . . . . . . . . Plastic Wall Phone Faceplate with 2-pair, 6-position USOC jack
MX-WP-(XX)-SS . . . . . MAX Series Stainless Steel Wall Phone Faceplate with keystone MAX module included

Use (XX) to specify color: 02 = white, 20 = ivory, 25 = bright white, 80 = light ivory

Use (XX) to specify wiring option:
Z6 = category 6 UTP, T568A/B; Z-MAX outlet
Z6A = category 6A UTP, T568A/B; Z-MAX outlet
Z6AS = category 6A Shielded, T568A/B; Z-MAX outlet
K6 = category 6 UTP, T568A/B; MAX outlet
K5 = category 5e UTP, T568A/B; MAX outlet
U3 = 3-pair, 6-position UTP USOC; MAX outlet
U4 = 4-pair, 8-position UTP USOC; MAX outlet
Siemon Universal Modular Furniture Adapter

Siemon’s extended depth, universal modular furniture adapter was specifically designed as a single product solution for securely mounting work area network connectivity in all of today’s most common modular furniture systems. The adapter’s universal mounting frame is adaptable to fit a wide range of available opening sizes, providing simple, snap-in attachment of the plates. This combination of mounting frame and plate facilitates the deployment of today’s larger diameter, high performance cabling in congested modular furniture pathways without exceeding performance-critical bend radius limits.

Available in MAX® and CT® versions, this product platform provides a universal mounting solution for all Siemon connectivity lines including CT, MAX, Z-MAX® and TERA®.

**Universal Mounting —**
Mounting frame adapts to fit nearly any furniture opening and panel thickness, eliminating the need for furniture-specific mounting products while providing a positive fit uncommon to fixed depth latch designs.

**Snap-in Faceplate Mounts —**
Robust latching features ensure secure engagement onto mounting frame – even with congested raceways – while providing quick and easy installation.

**Flexible Mounting —**
4-port MAX-style and single coupler CT-style plates are available to support a wide range of connectivity options.

**Impact Resistant —**
Low-profile, angled surface plates protect outlets while eliminating catch points to reduce potential damage due to incidental contact – a common concern in modular furniture environments.

**Universal Mounting —**
Mounting frame adapts to fit nearly any furniture opening and panel thickness, eliminating the need for furniture-specific mounting products while providing a positive fit uncommon to fixed depth latch designs.

**Manage Bend Radius —**
Extended plate design and optional angled adapters provide additional space to help maintain performance-critical bend radius.

**Improved Labeling Visibility —**
Angled, top-mount label window provides better label visibility in low-light, confined locations common to modular furniture applications.
Universal Modular Furniture Adapter

CT-UMA-(XX) . . . . . . . . . . . . . . . .
CT® Universal Modular Furniture Adapter, Accepts (1) CT Coupler. Includes faceplate, mounting frame, label and clear label holder

Use (XX) To specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light Ivory

MAX® Modular Furniture Adapters

The MAX modular furniture adapters will accept four Z-MAX hybrid outlets, MAX angled or flat modules and snaps directly into communication outlet openings* in most major modular furniture systems, including Steelcase, Haworth and Herman Miller. Adapters include designation label and clear label cover to allow for circuit identification.

*Furniture outlet openings, panel thickness, and raceway clearance may vary. Please consult furniture manufacturer for actual dimensions to determine compatibility.

Panel Cutout Requirements

Panel thickness: 0.76 – 2.03mm (0.030 – 0.080 in.)

MAX Modular Furniture adapters mount into modular furniture openings, combining superior density with proper circuit designation.

Panel Cutout Requirements

Panel thickness: 1.52mm (0.060 in.)

MAX Labeling and Accessories

Part #                                         Description
CT-FP-LBL-104* . . . . . . . . . . . . . 10 sheets of labels for faceplates that will fit any standard 8.5 x 11 printer, 104 labels/sheet
MX-FP-CVR-00 . . . . . . . . . . . . . Bag of 100 clear label covers for MAX faceplates

*Visit our web site or contact our Technical Support Department for labeling software.

Add “B” for bulk pack of 100 icons or tabs.

MAX Outlet Blanks

Blank inserts for unused ports and future growth.

MX-BL-(XX) . . . . . . . . . . . . . .
Blank module, bag of 10

Use (XX) to specify color: 00 = clear (MX-AD-XX only), 01 = black, 02 = white, 04 = gray, 20 = ivory, 25 = bright white*, 80 = light Ivory
MAX® Tamper-Proof Faceplate

Siemon's tamper-proof MAX faceplates provide a secure, low profile solution for mounting our complete line of MAX modules. The design features a one-piece base which accepts up to six angled MAX modules and is secured by a solid cover and a choice of tamper-proof star or standard slotted head screw. The base mounts to any standard North American single gang box.

Part #                                         Description
MX-TFP-S-06-(XX) . . . . . . . . . . 6-port single gang, tamper-proof faceplate for angled MAX modules

Use (XX) to specify color: 02 = white, 80 = light ivory
Faceplates include tamper-proof and standard #6-32x1 mounting screws and color-matching screw cover.
Note: Tamperproof faceplate is not compatible with Z-MAX® or TERA® outlets.

Surface Mounting Boxes for MAX and CT® Faceplates

These boxes offer a surface mounting option for MAX or CT single and double gang faceplates. These boxes are perfect for installations where the work area outlet cannot be recessed into a wall or floor box. The boxes are also compatible with our stand-off rings if extra depth is required behind the faceplate. Mounting hardware not included.

CT4-BOX-(XX). . . . . . . . . . . . . . . . . . . Surface mount box for single gang MAX or CT faceplate
height: 119.3mm (4.70 in.),
width: 74.8mm (2.95 in.),
depth: 40.6mm (1.60 in.)

CT8-BOX-(XX). . . . . . . . . . . . . . . . . . . Surface mount box for double gang MAX or CT faceplate
height: 119.3mm (4.70 in.),
width: 120.8mm (4.76 in.),
depth: 40.6mm (1.60 in.)

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory

AB . . . . . . . . . . . . . . . . . . . . . . . . . Adhesive backing
(package of 10)

MB . . . . . . . . . . . . . . . . . . . . . . . . . Magnetic backing
(package of 10)

Note: Two magnetic or adhesive backings required for double gang boxes.

Stand-Off Rings for MAX and CT Faceplates

Stand-off rings are a mounting option for installations that need extra depth behind the faceplate. They are compatible with both MAX and CT faceplates. The 25.4mm (1.00 in.) ring is especially useful to ensure the proper bend radius for optical fiber or other multimedia applications (faceplate not included).

Part #                                         Description
CT4-RING-050-(XX) . . . . . . . . . 12.7mm (0.50 in.) stand-off ring for single gang MAX or CT faceplate
CT4-RING-100-(XX) . . . . . . . . . 25.4mm (1.0 in.) stand-off ring for single gang MAX or CT faceplate
CT8-RING-050-(XX) . . . . . . . . . 12.7mm (0.50 in.) stand-off ring for double gang MAX or CT faceplate
CT8-RING-100-(XX) . . . . . . . . . 25.4mm (1.0 in.) stand-off ring for double gang MAX or CT faceplate

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory
Surface Mount Boxes

Surface mount boxes feature a sleek compact, easy-to-install design. UTP, shielded, fiber, video, and coax MAX,® Z-MAX® or TERA® outlets can be quickly installed into the base. Multiple cable management features provide a high performance and well organized installation.

Z-MAX Surface Mount Boxes

MX-SMZ(X)-(XX)-(X) . . . . . . . . . Z-MAX Surface mount box with cover base, 2 port multimedia bezel, cable ties, adhesive tape and mounting screws

<table>
<thead>
<tr>
<th>Ports</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = 1 port</td>
<td>(blank) = n/a</td>
</tr>
<tr>
<td>2 = 2 port*</td>
<td>M = magnets</td>
</tr>
<tr>
<td>4 = 4 port*</td>
<td>Color</td>
</tr>
<tr>
<td>6 = 6 port*</td>
<td>01 = Black</td>
</tr>
<tr>
<td></td>
<td>02 = White</td>
</tr>
<tr>
<td></td>
<td>20 = Ivory</td>
</tr>
<tr>
<td></td>
<td>80 = Light Ivory</td>
</tr>
</tbody>
</table>

* Includes designation labels and label covers

Also for use with single-port flat and duplex LC adapter modules and TERA outlets.
MX-SM Surface Mount Boxes

Field-assembled surface mount boxes with MAX® bezels. Accepts flat single port MAX outlets ordered separately.

MX-SM1-(XX) . . . . . . . . . . . . . . 1-port box with cover, base, one single port MAX bezel, cable ties, adhesive tape and mounting screws

MX-SM2-(XX) . . . . . . . . . . . . . . 2-port box with cover, base, one (2-port) MAX bezel, cable ties, adhesive tape, mounting screws, and designation labels

MX-SM4-(XX) . . . . . . . . . . . . . . 4-port box with cover, base, two (2-port) MAX bezels, cable ties, adhesive tape, mounting screws, designation labels and label covers

MX-SM6-(XX) . . . . . . . . . . . . . . 6-port box with cover, base, three (2-port) MAX bezels, cable ties, adhesive tape, mounting screws, designation labels and label covers

Use (XX) to specify color: 01 = black, 02 = white, 20 = ivory, 80 = light ivory
Add "-D" for optional spring shutter doors.
Add "-M" for optional magnets.
Add "-MD" for optional doors and magnets.

MX-SM Multimedia, SC Bezels and Blanks

Use (XX) to specify color: 01 = black, 02 = white, 20 = ivory, 80 = light ivory.
"SC adapters are "universal" to support both multimode and singlemode.

Note: Multimedia bezel accommodates Z-MAX®, TERA® outlets and flat MAX duplex LC adapters. They are also compatible with all other single port flat MAX modules, but require the use of icons to secure modules into bezel.

MX-SMB-MM-(XX) . . . . . 2-port multimedia bezel
MX-SMB-SC-(XX) . . . . . 2-port bezel with one duplex SC adapter*
MX-SM-BLNK-(XX) . . . . . 1-port blank insert for MAX bezels

6-Port SP5 Surface Pack Module

This 6-port SP5 Surface Pack is designed to provide high performance modular connectivity and category 5e transmission performance for mobile, surface mount applications. The module fits through 57.15mm (2.25 in.) diameter openings for easy relocation and can be mounted using either mounting screws (not provided) or optional internal mounting magnets. Cable tie strain relief points and tapered entrance secures and protects cables.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP5-C5</td>
<td>6-port, surface pack module, T568A/B. Includes icon label holder, label, and cable tie</td>
</tr>
</tbody>
</table>

Add "-M" for optional mounting magnets.

MAX bezels are compatible with all single port, flat MAX outlets. For LC, SC duplex fiber adapters, Z-MAX® and TERA® options, see MX-SM multimedia bezels below.
Surface Pack™ Box

Siemon’s Surface Pack Box is best described as a compact, lightweight box often utilized in high density work area environments that require rapid deployment of cabling systems. Typically deployed in buildings with a raised floor system, environments range from call centers to trading floors.

The box supports rapid deployment by allowing connectivity to be pre-terminated and stored away while construction is finalized. Cables can be routed within flexible conduit (not supplied), secured to the box and terminated to outlets. The small overall footprint allows the box and connectivity to be stored under a raised floor and then passed through standard size floor grommets for efficient deployment to the work station.

Surface Pack Boxes are available in 3 port and 6 port versions. Both boxes are the same size and compatible with MAX®, Z-MAX® and TERA® outlets allowing customers to support Category 5e, 6, 6A and 7A installations. The outlets are presented at an angle to allow patch cords to dress less prominently off the face of the box. Blanks may be used to accommodate port count variants and allow for expansion in the future. Ample labeling is provided for both the box and ports.

Two mounting options are available. One method features a mounting bracket that can be secured to a fixed location and allows the box to be clipped into the bracket via a one touch latch. For additional security, the box can be mounted without the use of the bracket by securing the base directly to the work area surface.
## Product Information

### PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Mechanical Properties</th>
<th>3 Port</th>
<th>6 Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Number</td>
<td>SP-3-01</td>
<td>SP-6-01</td>
</tr>
<tr>
<td>Conduit Opening</td>
<td>26 mm (1 in.)</td>
<td>32 mm (1.25 in.)</td>
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<table>
<thead>
<tr>
<th>Dimensions</th>
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</thead>
<tbody>
<tr>
<td>Length</td>
<td>192 mm (7.5 in.)</td>
<td></td>
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<tr>
<td>Width</td>
<td>54 mm (2 in.)</td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>61 mm (2.4 in.)</td>
<td></td>
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<tr>
<td>Weight</td>
<td>181 grams (6.3 oz.)</td>
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<tr>
<td>Material</td>
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<tr>
<td>Flammability Rating</td>
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<tr>
<td>Operating Temperature</td>
<td>-10° C to +60° C (14° F to 140° F)</td>
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</tr>
<tr>
<td>Relative Humidity</td>
<td>Up to 95%, non-condensing</td>
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<tr>
<td>Storage Temperature</td>
<td>-40° C to +70° C (14° F to 158° F)</td>
<td></td>
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<tr>
<td>Outlet Compatibility</td>
<td>TERA®, Z-MAX®, Hybrid UTP or Shielded, MAX® Flat UTP Outlets, MAX Blanks</td>
<td></td>
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<tr>
<td>Color</td>
<td>Black</td>
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</table>

### Ordering Information

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP-3-01</td>
<td>3 Port Surface Pack™ Box, Black</td>
</tr>
<tr>
<td>SP-6-01</td>
<td>6 Port Surface Pack Box, Black</td>
</tr>
</tbody>
</table>

Box Includes:

- 3 - Port identification labels and covers
- 1 - Box label and cover
- 1 - (203mm) Tie-wrap
- 1 - Screw for securing cover to the base of the box
Siemon 5 SQUARE® Telecommunications Outlet Box

Siemon’s 5 SQUARE telecommunications outlet box was specifically designed to support today’s high-performance copper and fiber optic cabling systems, providing 50% more useable space than traditional 4 square boxes. This additional space simplifies installation and cable management and helps maintain the strict bend-radius requirements of high-performance systems such as category 6A and category 7A copper while leaving room for future upgrades and expansions.

**50% More Space** — Siemon’s 5 SQUARE box provides 64 cubic inches of useable space versus just 30-42 cubic inches for standard boxes.

**Integrated Cable Management** — 5 SQUARE is the only telecommunications outlet box with an integrated cable management system.

**Support Larger-Diameter Cables** — Provides additional space for management of larger diameter cables, such as category 6A UTP.

**Manage Bend Radius** — Supports bend-radius requirements of high-performance cabling to ensure proper consistent performance.

**Flexible Mounting**
Standard and bracket-mounted versions feature multiple conduit knockout options.

**Installation Options**
Available with single and double-gang extension rings with depths up to 1 ¼ in.

**Faceplate/Box Compatibility**
Plaster/Reducer rings provide compatibility with all US style Siemon and 3rd party single and double gang faceplates, as well as Siemon MX-SM Surface-Mount Boxes, Fiber Outlet Boxes and MoTOA’s.
### Siemon 5 SQUARE® Telecom Outlet Box

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB55-01</td>
<td>5 SQUARE Telecom Box w/Cable Mgmt, (1) 1/2, (1) 3/4 in. and (1) 1 in. knockouts on each side</td>
</tr>
<tr>
<td>BB55-02</td>
<td>5 SQUARE Telecom Box w/Cable Mgmt, (2) 1 in. knockouts on each side</td>
</tr>
<tr>
<td>BB55-03</td>
<td>5 SQUARE Telecom Box w/Cable Mgmt, (1) 1 in. and (1) 1-1/4 in. knockouts on each side</td>
</tr>
<tr>
<td>BB55B-01</td>
<td>5 SQUARE Telecom Bracket Box w/Cable Mgmt, (1) 1/2, (1) 3/4 in. and (1) 1 in. knockouts on 3 sides only</td>
</tr>
<tr>
<td>BB55B-02</td>
<td>5 SQUARE Telecom Bracket Box w/Cable Mgmt, (2) 1 in. knockouts on 3 sides only</td>
</tr>
<tr>
<td>BB55B-03</td>
<td>5 SQUARE Telecom Bracket Box w/Cable Mgmt, (1) 1 in. &amp; (1) 1-1/4 in. knockouts on 3 sides only</td>
</tr>
<tr>
<td>BE55-1A</td>
<td>5 SQUARE Single Gang Plaster Ring, Flat</td>
</tr>
<tr>
<td>BE55-1B</td>
<td>5 SQUARE Single Gang Plaster Ring, 1/2 in. Raise</td>
</tr>
<tr>
<td>BE55-1C</td>
<td>5 SQUARE Single Gang Plaster Ring, 5/8 in. Raise</td>
</tr>
<tr>
<td>BE55-1D</td>
<td>5 SQUARE Single Gang Plaster Ring, 3/4 in. Raise</td>
</tr>
<tr>
<td>BE55-1E</td>
<td>5 SQUARE Single Gang Plaster Ring, 1 in. Raise</td>
</tr>
<tr>
<td>BE55-1F</td>
<td>5 SQUARE Single Gang Plaster Ring, 1-1/4 in. Raise</td>
</tr>
<tr>
<td>BE55-2A</td>
<td>5 SQUARE Double Gang Plaster Ring, Flat</td>
</tr>
<tr>
<td>BE55-2B</td>
<td>5 SQUARE Double Gang Plaster Ring, 1/2 in. Raise</td>
</tr>
<tr>
<td>BE55-2C</td>
<td>5 SQUARE Double Gang Plaster Ring, 5/8 in. Raise</td>
</tr>
<tr>
<td>BE55-2D</td>
<td>5 SQUARE Double Gang Plaster Ring, 3/4 in. Raise</td>
</tr>
<tr>
<td>BE55-2E</td>
<td>5 SQUARE Double Gang Plaster Ring, 1 in. Raise</td>
</tr>
<tr>
<td>BE55-2F</td>
<td>5 SQUARE Double Gang Plaster Ring, 1-1/4 in. Raise</td>
</tr>
</tbody>
</table>
Multi-User Telecommunications Outlet Assembly (MUTOA)

This low-profile multi-user/multimedia surface mount box is unsurpassed in features and flexibility, and is ideal for use as a Multi-user Telecommunications Outlet Assembly (MUTOA) as specified in TIA-568-C.1. It provides storage area for up to 12m (39 ft.) of buffered optical fiber cable using our optional fiber management tray and at least 2m (6.5 ft.) of 4-pair twisted pair cable in the base, while maintaining a minimum bend radius of 30mm (1.2 in.).

**Fiber Management**
Optional fiber management trays enable isolation and proper routing of optical fiber cabling.

**Innovative Labeling**
Hideaway labeling system flips down to reveal a designation area that utilizes standard size faceplate designation labels.

**US and European Compatible**
Compatible with any standard single or double gang electrical box including European standards.

**Storage Capacity**
Provides TIA compliance for cable slack while maintaining minimum bend radius requirements.

**Versatility**
MAX® MUTOA accommodates any combination of up to 18 ports of mixed media or up to 36 fiber ports.
CT® MUTOA accommodates any combination up to 6 CT couplers.

**MUTOA Ordering Information**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(XX)-MMO-(XX)</td>
<td>Multi-user/telecommunications outlet box with cable ties, mounting screws and adhesive tape. height: 200.2mm (7.88 in.) width: 200.2mm (7.88 in.) depth: 57.0mm (2.25 in.) Optional fiber management tray sold separately (see below).</td>
</tr>
</tbody>
</table>

Use (XX) to specify color: 02 = white, 20 = ivory, 80 = light ivory.

**Accessories**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT-MM0-MAG</td>
<td>Set of 3 magnets for mounting MUTOA</td>
</tr>
<tr>
<td>FMT</td>
<td>Clear fiber management tray for MUTOA</td>
</tr>
</tbody>
</table>
MAX® Zone Unit Enclosure

The MAX zone unit enclosure is an economical, high-density solution designed for use with low-profile sub-floor applications including Flexspace Cablefloor® and Haworth Nexus™. Enclosures are available to accommodate up to 48 ports of media using flat MAX, Z-MAX® and TERA® series modules and feature a 44.5 x 101.6mm (1.8 x 4.0 in.) opening for cable entry. Cable tie anchor points (hook and loop cable managers included) and fiber managers are conveniently located within the enclosure for proper routing and securing of cabling.

The enclosures are constructed of durable 16 gauge steel and feature a simple two piece design with a base and cover secured by four #6-32 screws. There are four mounting holes in the base for securing the enclosure to a mounting surface. The 48-port version includes internal support posts to provide additional structural support.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZU-MX-48</td>
<td>48-port MAX zone unit enclosure</td>
</tr>
<tr>
<td></td>
<td>height: 44.5mm (1.8 in.), width: 254.0mm (10 in.), depth: 377.8mm (14.9 in.)</td>
</tr>
<tr>
<td>ZU-MX-24-0515*</td>
<td>24-port MAX zone unit enclosure</td>
</tr>
<tr>
<td></td>
<td>height: 44.5mm (1.8 in.), width: 114.3mm (4.5 in.), depth: 377.8mm (14.9 in.)</td>
</tr>
</tbody>
</table>

*0515 denotes approximate width and depth in inches.

MAX® Fiber Adapter Modules

Siemon MAX fiber adapter modules are compatible with all MAX series faceplates, modular furniture adapters, surface mount boxes and patch panels. All fiber adapters are “universal” to support either multimode or singlemode fiber connections.

- **MX-F-SA-(XX)** . Flat module with 1 simplex ST adapter (1 fiber)
- **MX-SA-(XX)** . Angled module with 1 simplex ST adapter (1 fiber)
- **MX-F1-LC(X)-(XX)C** . Flat outlet with 1 duplex LC adapter (2 fibers)
- **MX-S2(X)-(XX)** . Angled outlet with 1 duplex ST adapter (2 fibers)
- **MX-F2(X)-(XX)** . Flat outlet with 1 duplex SC adapter (2 fibers)
- **MX-SC(X)-(XX)** . Angled outlet with 1 duplex SC adapter (2 fibers)

Use (X) to specify ST or SC adapter color: blank = black, Q = aqua

Use (X) to specify LC adapter color: blank = beige, U = blue, Q = aqua

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 25 = bright white, 80 = light ivory

Modules include dust caps, one color-matching, one red, and one blue icon per port.

"Compatible with SM® boxes.

www.siemon.com
Coax MAX Modules

For terminating coaxial cables at the work area or telecommunications room, Siemon’s coax MAX modules are available with both BNC and F-type adapters. The F-type is available in both flat and angled while the BNC is available in flat only. They each include a space for using color coded icons to identify type of service.

- **MX-FA-(XX)** Angled module with 1 F-type adapter, 75 ohms, 2 GHz
- **MX-F-BA-(XX)** Flat module with 1 BNC adapter, 75 ohms
- **MX-F-FA-(XX)** Flat module with 1 F-type adapter, 75 ohms, 2 GHz
- **MX-F-RC-(XX)** Flat module with 1 RCA connector with solder tail

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory
Modules include one color-matching, one red, and one blue icon.
*Compatible with SM® boxes.

MAX Audio/Video Modules

Siemon audio/video MAX modules provide connectivity for a wide range of applications. Available media types include RCA, SVHS and HD15.

- **MX-F-RC-(XX)** Flat module with 1 RCA connector with solder tail
- **MX-RC-(XX)** Angled module with 1 RCA connector with solder tail

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory
RCA Modules include one color-matching, one red, and one blue icon.
*Compatible with SM boxes.
Fiber Outlet Box (FOB2)

Siemon’s low-profile Fiber Outlet Box (FOB2) is the optimal solution for bringing fiber to the desk. The FOB2 offers a well-defined method for managing fiber cabling at the work area by providing a connection point for up to 12 fibers connectors utilizing slide-in bezels.

**FOB2-(XX)** includes base, cover, designation labels, clear label covers, mounting hardware, cable ties, icons, and three blank bezels

**FOB2-GRD-(XX)** includes base, extended cover, designation labels, clear label covers, mounting hardware, cable ties, icons, and three blank bezels

*Use (XX) to specify color: 01 = black, 02 = white, 08 = light ivory*

**Fiber Bezels**

**FOB-BZL-LC(X)-01**
1 Duplex LC adapter, (2 fibers)

**FOB-BZL-LC(X)-02**
2 Duplex LC adapters, (4 fibers)

**FOB-BZL-SA-01**
1 Duplex ST adapter, (2 fibers)

**FOB-BZL-SL-01**
Blank bezel

*Use (X) to specify adapter color: blank = beige, U = blue, Q = aqua*

*Note: Fiber adapters are “universal” to support both multimode and singlemode.*
CT® Faceplates

CT2-FP-(XX) ............ 1-port single gang plastic faceplate for a CT adapter
CT4-FP-(XX) ............ 2-port single gang plastic faceplate for CT adapters
CT8-FP-(XX) ............ 4-port double gang plastic faceplate for CT adapters

CT2-HFP-(XX)* ........... 1-port single gang plastic horizontal faceplate for a CT adapter, with color matching screw caps

Use (XX) to specify color: 02 = white, 20 = ivory, 80 = light ivory
Faceplates include designation label(s), label cover(s) and #6-32x1 screws.
*Not available in bulk project pack.

Add “B” to end of part number for bulk project pack, (includes 100 CT2 or CT4 faceplates or 50 CT8 faceplates, screws, designation labels, and label covers).

Stainless Steel CT Faceplates

CT4-FP-SS .................. Single gang stainless steel faceplate for two couplers
CT8-FP-SS .................. Double gang stainless steel faceplate for four couplers
CT12-FP-SS .................. Triple gang stainless steel faceplate for six couplers

CT4-FP-SS-L ............... Single gang stainless steel faceplate for two couplers with labels and label holders
CT8-FP-SS-L ............... Double gang stainless steel faceplate for four couplers with labels and label holders

CT8-FP-SS-L ................ Double gang stainless steel faceplate for four couplers with labels and label holders
CT12-FP-SS ................ Triple gang stainless steel faceplate for six couplers
TERA®-MAX® Adapters for CT® Faceplates

Designed for use in standard CT faceplates or adapters, adapters feature angled bezel orientation to reduce mounting depth requirements for Z-MAX®, TERA and flat MAX outlets and facilitates gravity feed installation design.

CTE-MXA-01-02 . . . . . . .
Angled CT adapter for
one MAX, Z-MAX or
TERA outlet, white

CTE-MXA-02-02 . . . . . . .
Angled CT adapter for
two MAX, Z-MAX or
TERA outlets, white

CTE-HZA-02-(XX) . . . . .
Horizontal CT adapter for
two Z-MAX, MAX or TERA
outlets

Use (XX) to specify color: 01 = black, 02 = white

See page 8.8 for Universal Modular Furniture Adapters for CT adapters.

CT Modular Furniture Adapters

CT-MFP-(XX) . . . . . . .
Adapter for standard openings including
Steelcase (accepts one CT coupler)
Use (XX) to specify color:
01 = black, 02 = white, 04 = gray,
20 = ivory, 80 = light ivory

CTMFP-HMA-(XX) . . . . .
Adapter for Herman Miller Action Office
Series 2 and Ethospace base openings
(accepts two CT couplers)
Use (XX) to specify color:
01 = black, 02 = white

Faceplate Accessories

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTFP-LBL-104*</td>
<td>10 sheets of labels for faceplates that will fit any standard 8.5 x 11 printer, 104 labels per sheet</td>
</tr>
<tr>
<td>CTFP-CVR</td>
<td>Bag of 100 clear label covers for CT faceplates</td>
</tr>
</tbody>
</table>

*Visit our web site or contact our Technical Support Department for labeling software.
Flat CT® 3 Couplers

Flat CT 3 couplers provide a full range of voice wiring configurations. They are available with single or double modular jacks.

**Double Couplers**

CT-(XX)-(XX)-(XX)
Flat, double coupler

Use 1st (XX) to specify jack A (see below)
Use 2nd (XX) to specify jack B (see below)
Use 3rd (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory

**Single Couplers**

CT-(XX)-(XX)
Flat, single coupler

Use 1st (XX) to specify jack option (see below)
Use 2nd (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory

**Jack Options:**
- U3 = 3-pair, 6-position jack, USOC
- U4 = 4-pair jack, USOC

*Add “B” to end of part number for bulk project pack of 100 couplers.*
(Bulk option includes couplers and icons only — termination caps and cable ties are available separately, see page 1.21).
Couplers include one color-matching icon (clear for black, 2 termination caps, and one cable tie per port, plus one red and one blue icon.)

---

**Coax CT Couplers**

CT-BA-(XX)
Flat coupler with 1 BNC adapter

CT-A-BA-(XX)
Angled coupler with 1 BNC adapter

CT-FA-(XX)
Flat coupler with 1 F-type adapter

CT-A-FA-(XX)
Angled coupler with 1 F-type adapter

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory
Couplers include one color-matching icon (clear for black); one red and one blue icon.

---

**Fiber Adapter CT Couplers**

The CT fiber coupler line consists of LC, SC, ST and SC/ST hybrid adapters available in 2 and 4 fiber versions. Angled versions are available with our patented gravity-feed design for controlling the bend radius of fiber cables at the work area. All fiber adapters are “universal” to support either multimode or singlemode fiber connections.

CT-LC(X)-(XX)
Flat coupler with 1 duplex LC adapter (2 fibers)

CT-LC(X)-LC(X)-(XX)
Flat coupler with 2 duplex LC adapters (4 fibers)

CT-A-LC(X)-(XX)
Angled coupler with 1 duplex LC adapter (2 fibers)

CT-A-LC(X)-LC(X)-(XX)
Angled coupler with 2 duplex LC adapters (4 fibers)

CT-SC(X)-SC(X)-(XX)
Flat coupler with 1 duplex SC adapter (2 fibers)

CT-SC(X)-4-(XX)
Flat coupler with 2 duplex SC adapters (4 fibers)

CT-A-SC(X)-SC(X)-(XX)
Angled coupler with 1 duplex SC adapter (2 fibers)

CT-A-SA-SA-(XX)
Angled coupler with 1 duplex ST adapter (2 fibers)

CT-SC(X)-4-(XX)
Flat coupler with 2 duplex ST adapters (4 fibers)

CT-A-SA-SA-(XX)
Angled coupler with 1 duplex ST adapter (2 fibers)

CT-SA-SA-(XX)
Flat coupler with 1 duplex ST adapter (2 fibers)

Use (X) to specify LC and SC adapter color: blank = beige, U = blue, O = aqua
Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory
Couplers include one color-matching icon (clear for black); plus one red and one blue icon.
Modular Y-Adapters

Y-Adapters are available as "splitters" which convert one 4-pair jack into two jacks. The Y-Adapters utilize Siemon's patented UP-2468 plug which allows adapters to be used in 6- or 8-position jacks. The adapter body can be rotated 180° to view either the colored icons or the Y-Adapter pinouts, which are printed on the opposite side.

**Modular 4-Way Splitter**

Siemon's modular 4-way splitter provides access to each individual pair of a 4-pair modular outlet. The splitter converts a single 4 pair outlet to 4 individual 1-pair, 8-position outlets to enable four unique modular connections. The universal plug design enables compatibility with both 6- and 8-position outlets.

- **YU4-U2-U2**
  - Splits a 4-pair USOC jack for Token Ring or voice applications at either jack
- **YT4-U2-U2**
  - Splits a 4-pair T568B jack for Token Ring or voice applications at either jack
- **YT4-E2-U2**
  - Splits a 4-pair T568B jack for Token Ring or voice applications at either jack
- **YT4-E2-E2**
  - Splits a 4-pair T568A/B jack for 10BASE-T applications at either jack
- **YT4-U2-U2**
  - Splits a 4-pair T568A jack for Token Ring or voice applications at either jack
- **YT4-E2-U2**
  - Splits a 4-pair T568A/B jack for Token Ring or voice applications at either jack
- **YT4-E2-E2**
  - Splits a 4-pair T568B jack for 10BASE-T applications at either jack
- **YT4-E2-U2**
  - Splits a 4-pair T568A/B jack for 10BASE-T applications at either jack
- **YT4-E2-U2**
  - Splits a 4-pair T568B jack for 10BASE-T applications at either jack
- **YT4-E2-E2**
  - Splits a 4-pair T568A/B jack for 10BASE-T applications at either jack
- **YT4-E2-U2**
  - Splits a 4-pair T568A/B jack for 10BASE-T applications at either jack
- **YT4-E2-E2**
  - Splits a 4-pair T568B jack for 10BASE-T applications at either jack
- **YT4-E2-U2**
  - Splits a 4-pair T568A/B jack for 10BASE-T applications at either jack
- **YT4-E2-E2**
  - Splits a 4-pair T568B jack for 10BASE-T applications at either jack

- **YA4-U2-U2**
  - Splits a 4-pair USOC jack for Token Ring or voice applications at either jack
- **YT4-U2-U2**
  - Splits a 4-pair T568B jack for Token Ring or voice applications at either jack
- **YT4-E2-U2**
  - Splits a 4-pair T568B jack for Token Ring or voice applications at either jack
- **YT4-E2-E2**
  - Splits a 4-pair T568A/B jack for 10BASE-T applications at either jack
- **YT4-E2-U2**
  - Splits a 4-pair T568A/B jack for 10BASE-T applications at either jack
- **YT4-E2-E2**
  - Splits a 4-pair T568B jack for 10BASE-T applications at either jack
- **YT4-E2-U2**
  - Splits a 4-pair T568A/B jack for 10BASE-T applications at either jack
- **YT4-E2-E2**
  - Splits a 4-pair T568B jack for 10BASE-T applications at either jack

**Note:** These modular adapters meet category 3 transmission specifications.
Universal Modular Plug

Our patented “universal” modular plug eliminates the need to stock more than one size modular plug. The UP-2468 permits field-termination of modular cords in 2-, 3-, or 4-pair increments and terminates twisted pair cable with 26 – 22 AWG (0.40mm – 0.64mm) solid or 7-strand conductors with insulated conductor diameter of 0.86 – 0.99mm (0.034 – 0.039 in.). Plug contacts have 50 microinches minimum of gold plating over nickel and meet TIA-968-A and IEC 60603-7 specifications. Universal modular plugs are compatible with Siemon PT-908 crimp tool.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP-2468</td>
<td>“Universal” modular plug fits 6 or 8-position RJ outlets</td>
</tr>
</tbody>
</table>

Modular Plugs

We offer modular plugs in standard configurations to terminate modular cords for patching or work area applications. Modular plugs can be terminated to the exact cable length needed in order to maintain a neater, more organized installation. The plugs terminate twisted-pair cable with 26 – 22 AWG (0.40mm – 0.64mm) solid or 7-strand conductors with an insulated conductor diameter of 0.86 – 0.99mm (0.034 – 0.039 in.). All plug contacts have 50 microinches minimum of gold plating over nickel and meet TIA-968-A and IEC 60603-7 specifications. All plugs are compatible with Siemon PT-908 crimp tool.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-8-8</td>
<td>8-position modular plug with 8 contacts</td>
</tr>
<tr>
<td>P-8-8SS</td>
<td>8-position modular plug with 8 contacts</td>
</tr>
<tr>
<td>PS-8-8</td>
<td>8-position shielded modular plug with 8 contacts</td>
</tr>
<tr>
<td>P-6-6</td>
<td>6-position modular plug with 6 contacts*</td>
</tr>
<tr>
<td>P-6-4</td>
<td>6-position modular plug with 4 contacts*</td>
</tr>
</tbody>
</table>

Technical Tip!
Factory terminated and tested modular cords are required to achieve consistent channel performance. Field termination is not recommended.

*Siemon 6-position plugs provide empty slots in the outer positions to prevent deformation of jack pins 1 & 8 when inserted into an 8-position modular jack.
**Category 5e and 3 25-Pair Cable Assemblies**

Our 25-pair cable assemblies are factory-tested for opens, shorts, and continuity. They feature TIA-1096-A compliant gold plated contacts for extended reliability over time. Category 3 connector ends are available in single-ended male or female, double-ended male or female, or one male/one female configurations. All 25-pair cable assemblies are made with TIA/EIA-568-B.2 category 5e or 3 compliant cable.

**Category 5e Cable Assemblies**

- GP25M-AA-(XX) . . . . . . . . . . . . 25-pair, double ended 110°-to-110°, cable assembly with male connectors

**Category 3 Cable Assemblies**

- A25B-DE-(XX) . . . . . . . . . . . . 25-pair, double-ended, cable assembly with female connectors
- A25B-SE-(XX) . . . . . . . . . . . . 25-pair, single-ended, cable assembly with one female connector
- B25A-(XX) . . . . . . . . . . . . . . 25-pair, double-ended, cable assembly with one male and one female connector
- B25B-DE-(XX) . . . . . . . . . . . . 25-pair, double-ended, cable assembly with male connectors
- B25B-SE-(XX) . . . . . . . . . . . . 25-pair, single-ended, cable assembly with one male connector

*Use (XX) to specify length: 05 = 1.52m (5 ft.), 10 = 3.05m (10 ft.), 15 = 4.57m (15 ft.), 25 = 7.62m (25 ft.)*

**RG6 F-Type Coax Connector**

Siemon’s compression style RG6 F-type connector uses industry leading 360° compression technology for superior RF shielding performance to quickly terminate series 6 tri-shield and quad shield coaxial cables.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RG6C</td>
<td>RG6 F-type compression connector</td>
</tr>
</tbody>
</table>
Racks and Cable Management

Siemon’s line of open racks and cable management solutions covers nearly any network infrastructure need: 4-post and 2-post racks, exclusive rack-mount vertical cable managers, 19 inch horizontal managers, cable tray and much more.

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S110®/S210® Horizontal Cable Managers .......... 9.16
Rear Cable Managers ..................................... 9.16
VersaPOD® 4-Post Rack

Siemon’s adjustable-depth, VersaPOD 4-Post Rack provides a stable platform for mounting extended depth/size active equipment. It is ideal for use in both Telecommunications Rooms and central patching areas within Data Center environments.

In addition to providing compatibility with Siemon’s stand alone vertical cable managers, the 4-post rack is fully compatible with the 45U Zero-U panels used in Siemon’s VersaPOD cabinets. This compatibility allows for mounting of patch panels or cable management between bayed racks or at end of rows.

The headers, vertical rails and depth adjustment brackets all feature symmetrical designs to eliminate orientation errors during assembly. They also work in conjunction to self-square the rack during assembly saving valuable installation time. The result is a rack that can be field assembled in less than 20 minutes.

Field Adjustable Depth — Rack depth can be field adjusted in 25mm (1 in.) increments to accommodate a range of equipment depths

Slotted Mounting Holes — Provide a flexible securing point for ladder or wire basket trays mounted perpendicular or parallel to rack

Stamped U Space Indications — Provide ready visual indication of proper panel alignment

In-Facing Headers and Footers — Maximize floor space while maintaining full load capabilities

In addition to Siemon’s stand alone vertical cable managers, the VersaPOD 4-Post Rack is compatible with Siemon’s Zero-U patching and cable management panels.

Eight (8) ground post locations (4 on top, 4 on bottom) provide ready accessible ground attachment points.

www.siemon.com
VersaPOD® 4-Post Rack

Ordering Information:

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSQ1-07-S</td>
<td>VersaPOD 4-post rack, 560-915mm (23 - 36 in.), Steel, Black, 45U, #12-24</td>
</tr>
<tr>
<td>RSQ1-07C-S</td>
<td>VersaPOD 4-post rack, 560-915mm (23 - 36 in.), Steel, Black, 45U, Cage nuts*</td>
</tr>
<tr>
<td>RSQ-BAY -VPP</td>
<td>VersaPOD 4-post rack baying bracket for Zero-U Panels, set of 4</td>
</tr>
</tbody>
</table>

Zero-U baying brackets are required to ensure proper operation of Zero-U panels.

*Includes bag of 50 M6 cage nuts.

VersaPOD 4-POST RACK SPECIFICATIONS:

<table>
<thead>
<tr>
<th>U Space</th>
<th>45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Black</td>
</tr>
<tr>
<td>Packaging</td>
<td>Ships unassembled in a single carton</td>
</tr>
<tr>
<td>Standard Compliance</td>
<td>EIA/ECA-310-E, UL 60950, RoHS</td>
</tr>
<tr>
<td>Compatibility</td>
<td>RS-CN1, RS-CN1L, VPCA-6, VPCA-12, Zero-U VersaPOD Panels</td>
</tr>
<tr>
<td>Weight</td>
<td>48 kgs, (105 lbs.) Full weight with packaging</td>
</tr>
<tr>
<td>Load Rating</td>
<td>907 kgs (2000 lbs.) Static load, evenly distributed</td>
</tr>
</tbody>
</table>

Cable Managers

The VersaPOD 4-Post Rack is compatible with the following Siemon cable management products:

- RouteIT™ vertical managers and accessories
- Vertical cable management channels
- RouteIT horizontal cable managers, HCM-(X)-(X)U
- WM series horizontal cable managers
- RWM series horizontal cable managers
- S110 horizontal magagers
- Vertical patching channels
Siemon’s RS3 series cable management rack system provides integral, high capacity cable management for routing of both horizontal/backbone cabling and patch cords. Vertical channels with hinged cable manager covers conceal and route patch cables for a clean, professional installation.

**High Capacity** — 76mm x 152mm (3 x 6 in.) front vertical managers provide capacity for approximately 190 Category 6 patch cords.

**Cable Tray Compatibility** — Header bars incorporate unique slotted holes for securing cable trays routed perpendicular or parallel to RS3 racks.

**Deeper Channels** — 116.8mm x 152.4mm (5 x 6 in.) vertical side rails provide higher cable capacity over standard rack designs.

**Side Stackable** — RS3 design allows racks to be side-stacked without interference between adjacent racks.

**Flexible Management** — Side rails compatible with Siemon’s quarter-turn hook and loop cable managers for proper management of cable bundles.

**Cable Access Holes** — Access holes on side rails allow cables to be routed between adjacent racks.

**Power Strip Compatibility** — Mounting holes on rear of RS3 accommodate Siemon’s vertical power strip (p/n RS-P04) and intelligent PDUs (see Section 11) to provide power to active equipment mounted in rack.

**Hinged Front Covers** — Front covers fully conceal all vertical patch cord routing through an easy to use, modular design. Each section can be individually hinged in either direction to facilitate quick and easy changes. Covers include positive securing snap latches for trouble-free fastening.

**Rounded Managers** — The individual managers on the vertical channels are rounded to allow patch cords to seamlessly enter and exit the managers without risk of cable deformation.

**Matching Horizontal Managers** — Siemon’s RS3 series horizontal cable managers provide a fully integrated appearance and same hinging design for comprehensive management of patch cords.

**Anchoring** — Mounting holes provided for anchoring racks to floor.
RS3 Cable Management Rack System

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS3-07</td>
<td>Aluminum enhanced cable management rack system, 45U. Includes rack assembly hardware, vertical cable management channels with hinged covers, and ground lug</td>
</tr>
</tbody>
</table>

- height: 2.1m (7 ft.)
- width: 685.0mm (27 in.)
- depth: 457.2mm (18 in.)

Add “S” for steel.

Note: Aluminum racks (RS3-07) are available and intended for use with connecting hardware and cable managers only. For mounting of active equipment, steel racks are recommended.

Note: 1U = 44.5mm (1.75 in.)

See Cable Management Capacity Table in the Cable Management Section of our E-Catalog on our Website

Cable Managers

The RS3 Cable Management Rack is compatible with the following Siemon rack-mounted cable management products:

- RouteIT™ horizontal cable managers, HCM-(X)-(X)U
- WM series horizontal cable managers
- RWM series horizontal cable managers
- S110 horizontal cable managers
- Vertical patching channels
RS Rack System

Siemon’s RS series cable management rack system combines a 7 ft. black rack with cable management accessories to provide a complete cable management solution. Ideal for all size installations, the rack features fully usable 45U capacity.

Cable Tray Compatibility — Header bars incorporate unique slotted holes for securing cable trays routed perpendicular to or parallel with RS racks.

Twist-Lock Cable Managers — High capacity twist-lock cable managers lock into place quickly without use of screws or mounting tools and can be easily located in many positions on the front, side, back, and within channel to provide customized cable management.

Anchoring — Mounting holes provided for anchoring rack to floor.

High Capacity Side Rails
76 x 152mm (3 x 6 in.) vertical side rail channels on rack provide large area for routing high volumes of horizontal or backbone cables.

Complete Management System
Comprehensive cable management can be created using Siemon’s RouteIT™ Vertical Cable Managers (VCM-(XX) and VCM-(XX)D), Vertical Patching Channels (VPCA-(X) and RS Series Horizontal Cable Managers).

Optional Vertical Cable Channels
Optional vertical cable management channels (RS-CNL and RS-CNL3) and Vertical Patching Channels (VPCA-(X)) allow a high volume of patch cords to be routed between two racks or within a single rack.

www.siemon.com
RS Rack System

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS-07-S</td>
<td>Steel cable management rack system, 45U. Includes: rack assembly hardware, 10 high-capacity cable managers, 10 hook and loop cable managers, grommets, and ground lug. Height: 2.1 m (7 ft). Width: 603 mm (23.75 in.). Depth: 457 mm (18 in.).</td>
</tr>
</tbody>
</table>

Note: Aluminum racks are available (P/N: RS-07) and intended for use with connecting hardware and cable managers only. For mounting of active equipment, steel racks are recommended.

Extended Depth RS Rack System

Siemon has developed a rack for managing extra large volumes of horizontal cables. The extended depth rack features vertical channels which are 0.37 m (1.2 ft.) deep. These channels include multiple mounting holes allowing the user to configure Siemon’s twist-lock hook and loop cable managers for properly managing large individual bundles of cables. The footers have also been designed to retain the 0.61 m (2 ft.) overall footprint.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS-07E</td>
<td>2.1 x 0.48 m (7 x 1.6 ft.) aluminum extra-deep cable management rack system, 45U. Includes rack assembly hardware, 10 high-capacity cable managers, 10 hook and loop managers, grommets and ground lug. Height: 2.1 m (7 ft). Width: 609 mm (24 in.). Depth: 609 mm (24 in.).</td>
</tr>
</tbody>
</table>

Note: Aluminum racks are intended for use with connecting hardware and cable managers only. For mounting of active equipment, steel racks such as RS-07-S are recommended.

Cable Managers

The RS Rack System is compatible with the following Siemon cable management products:

- RouteIT™ vertical managers and accessories
- Vertical cable management channels
- RouteIT horizontal cable managers with extended covers, HCME-(X)-(X)U
- WM series horizontal cable managers
- RWM series horizontal cable managers
- S110 horizontal cable managers
- Vertical patching channels
Racks and Cable Management

Rack Accessories

Siemon offers a full range of accessories to allow further customisation of Siemon racking systems.

RS-CH . . . . . . . . . . . . . . .
Quarter-turn cable managers

RS-VCM . . . . . . . . . . . . . . .
Quarter-turn hook and loop cable managers includes roll of (10) 457mm (18 in.) hook and loop black cable managers and (10) quarter-turn mounting clips

SCREW-1224 . . . . . . . .
#12-24 Slotted head screws with washers, black, bag of 100

PH-3 . . . . . . . . . . . . . . . . . . .
3U panel access hinge includes integral 1U panel with 5 removable cable managers and accepts one 2U or two 1U patch panels

Note: 1U = 44.5mm (1.75 in.)

Technical Tip!
For information on Siemon’s Power Distribution Units (PDUs) see Power and Cooling Section 11

Rack Hinge

Siemon rack hinges are designed to allow rack mounted patch panels to swing out (horizontally) from the rack. The hinges are available in 2 and 3U sizes which can be combined to mount 4 and 6U panels. The 2U hinge is capable of mounting one 2U or two 1U panels.

Part # Description U
RHNG-2 . . . . . . . . . . . . . . . . . . Rack hinge . . . . . . . . . . . 2
RHNG-3 . . . . . . . . . . . . . . . . . . Rack hinge . . . . . . . . . . . 3

Note: 1U = 44.5mm (1.75 in.)

Vertical Cable Management Channels

Siemon’s single-sided vertical cable management channels provide an economic solution for managing large cable bundles between adjacent racks. They feature an open design with six easily configured dual-hinge managers (additional managers available separately) that enable customized management of patch cords. Cable access holes allow cords to be routed between the front and rear of the channel. Mounting holes within the channel accommodate Siemon’s quarter-turn cable managers (p/n RS-CH) and quarter-turn hook and loop cable managers (p/n RS-VCM) for further customisation of cable routing. The channels are available in both 76mm (3 in.) and 152mm (6 in.) depths for use with standard 76mm (3 in.) racks or 152mm (6 in.) deep cable management racks such as Siemon’s RS-07. Alternately, the 76mm (3 in.) deep channels can be stacked back to back with the deeper cable management racks such as Siemon's RS-07E to optimize management of cables on both sides of the channel.

RS-CNL . . . . . . . . . . . . . . . . . .
vertical cable management channel for mounting between 152mm (6 in.) deep racks (includes mounting hardware)

height: 2.1m (7 ft.)
width: 152mm (6 in.)
depth: 224mm (8.85 in.)

RS-CNL3 . . . . . . . . . . . . . . . .
vertical cable management channel for mounting between 76mm (3 in.) deep racks (includes mounting hardware)

height: 2.1m (7 ft.)
width: 152mm (6 in.)
depth: 148mm (5.85 in.)

Two RS-07’s shown with three RS-CNL’s
Vertical Patching Channel (VPC)

Siemon’s enhanced Vertical Patching Channel (VPC) sets a new standard for cable management systems by improving appearance, accessibility and cable routing on both the front and rear of the rack. Designed as a stand-alone manager to be mounted between adjacent racks the VPC features a full length, hinged door on the front to conceal patch cord routing. The rear manager is open for ready routing of large bundles of horizontal/backbone cabling. With its easy access design, high capacity and professional appearance, the VPC is ideal for both installers and end users alike.

- **Cable Access Holes** allow cables to route easily between the front and rear of the channel.
- **Available in standard 152mm (6 in.) wide version or high capacity 304mm (12 in.) version**
- **Field replaceable cable management fingers** can be quickly replaced if damaged or broken.
- **With an easy turn of a single knob, the full-length cover hinges in either direction to provide access to the entire vertical channel.**
- **Side mounting holes** provide compatibility with common 76mm and 152mm (3 in. and 6 in.) industry racking systems including Siemon’s RS-07 and XLBET frames as well as Siemon’s extended depth RS rack system.*
- **Optional quarter-turn cable managers** can be mounted within vertical channels for additional management such as segregation of application specific cords.
- **Rear channel retainers** can be hinged in either direction and are removable enabling relocation to any position along the rear vertical channel.
- The VPC is fully side stackable for use in ultra high density environments. The doors can be individually opened 60° or adjacent doors can be removed for full access.
- All of the cable routing points on the vertical channels are rounded to allow patch cords to seamlessly enter and exit the managers without risk of cable deformation.

*When used with extended depth rack, rear channel is used for mounting purposes only.
RACKS AND CABLE MANAGEMENT

152mm (6 in.) Enhanced Vertical Patching Channel

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VPCA-6</td>
<td>2.1m x 152mm (7 ft. x 6 in.) vertical patching channel. Includes front cover, 6 rear channel</td>
</tr>
<tr>
<td></td>
<td>retainers and mounting hardware</td>
</tr>
<tr>
<td></td>
<td>height: 2.1m (7 ft.)</td>
</tr>
<tr>
<td></td>
<td>width: 152.4mm (6 in.)</td>
</tr>
<tr>
<td></td>
<td>depth: 304.8mm (12 in.)</td>
</tr>
</tbody>
</table>

305mm (12 in.) Enhanced Vertical Patching Channel

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VPCA-12</td>
<td>2.1m x 305mm (7 ft. x 12 in.) vertical patching channel. Includes front cover, 12 rear channel</td>
</tr>
<tr>
<td></td>
<td>retainers and mounting hardware</td>
</tr>
<tr>
<td></td>
<td>height: 2.1m (7 ft.)</td>
</tr>
<tr>
<td></td>
<td>width: 304.8mm (12 in.)</td>
</tr>
</tbody>
</table>

Cable capacities reflect a calculated fill rate of 40% which is intended to reflect 100% fill during actual use due to side cable entry.

CABLE MANAGER CAPACITY TABLE

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Diameter</th>
<th>Cable Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3.30 3.81 4.32 4.83 5.33 5.84 6.35 6.86 7.37 7.87 8.38 8.89</td>
</tr>
<tr>
<td>VPCA-6 (Front)</td>
<td>683</td>
<td>513 399 319 261 218 184 156 137 120 106 94</td>
</tr>
<tr>
<td>VPCA-6 (Rear)</td>
<td>1059</td>
<td>795 619 495 405 338 286 245 212 186 164 146</td>
</tr>
<tr>
<td>VPCA-12 (Front)</td>
<td>1464</td>
<td>1100 856 685 561 467 396 339 294 257 227 202</td>
</tr>
<tr>
<td>VPCA-12 (Rear)</td>
<td>2118</td>
<td>1591 1238 991 811 676 572 491 435 372 328 293</td>
</tr>
</tbody>
</table>

VPC Accessories

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCM-FGR-6</td>
<td>152mm (6 in.) Vertical Cable Manager</td>
</tr>
<tr>
<td></td>
<td>Replacement Fingers, 9U, Set of 2</td>
</tr>
<tr>
<td>VCM-DR(XX)</td>
<td>Replacement Door</td>
</tr>
</tbody>
</table>

Use (XX) to specify width:
6 = 152mm (6 in.)
12 = 304mm (12 in.)

www.siemon.com
RouteIT™ Cable Managers

Siemon’s RouteIT vertical and horizontal cable managers are specifically designed to readily manage the challenges proposed by today’s high volume, high density cabling systems. Available in multiple sizes, these versatile cable managers provide a system solution for ready routing and protection of both horizontal cables and patch cords.

Full length, dual hinge doors protect and conceal cabling providing a premium appearance capable of supporting today’s high speed network cabling systems.
Vertical Managers – Ordering Information

- VCM-(XX) - RouteIT™ Single-sided Vertical Cable Manager
  - Use (XX) to specify width:
    - 6 = 152mm (6 in.),
    - 10 = 254mm (10 in.),
    - 12 = 305mm (12 in.),
    - 16 = 406mm (16 in.)

- VCM-(XX)D - RouteIT Double-sided Vertical Cable Manager
  - Use (XX) to specify width:
    - 6 = 152mm (6 in.),
    - 10 = 254mm (10 in.),
    - 12 = 305mm (12 in.),
    - 16 = 406mm (16 in.)

Vertical Managers – Accessories

- VCM-S - 2.13m x 457mm (7 ft. x 18 in.) Side Panel Kit for RouteIT Double-sided Vertical Cable Managers
  - Note: Side panel kit is a two piece design comprised of one top and one bottom piece and includes mounting hardware

- VCM-FGR-6 - 152mm Vertical Cable Manager Replacement Fingers, 9U, Set of 2

Horizontal Managers – Ordering Information

- HCM-4-(X)U - RouteIT Horizontal Cable Manager w/ 102mm (4 in.) Fingers
  - Use (X) to specify height: 1 = 1U, 2 = 2U, 4 = 4U
  - Add "-D" to end of part number for double-sided version (2U only)

- HCM-6-(X)U - RouteIT Horizontal Cable Manager w/ 152mm (6 in.) Fingers

- HCME-4-(X)U - RouteIT Horizontal Cable Manager w/ 102mm (4 in.) Fingers and Extended Length Cover

- HCME-6-(X)U - RouteIT Horizontal Cable Manager w/ 152mm (6 in.) Fingers and Extended Length Cover

- HCM(E)-CVR-(X)U - RouteIT Horizontal Cable Manager Replacement Cover
Cable Tray Rack

Designed to mount directly to overhead ladder rack or cable tray, Siemon’s Cable Tray Rack delivers 4U of easily installed and accessible 19 inch rack mount space above cabinets and racks without consuming additional floor space, making it ideal for use as a Zone Distribution Area (ZDA) or Equipment Distribution Area (EDA) in data centers. Used with copper patch panels or fiber enclosures, the cable tray rack can increase cabling density, improve cable routing, simplify moves, adds and changes and provide pre-cabled connectivity for rapid deployment of new cabinets, racks and equipment.

- Improved Thermal Efficiency — Helps improve airflow by managing patching fields and cabling above cabinets and racks, minimizing obstruction of equipment cooling features.
- Rapid Data Center Deployment — Can be used in conjunction with Siemon’s pre-terminated copper and fiber solutions to reduce installation time.
- Open Compatibility — Rack mount solution attaches to all common overhead cable tray and ladder rack systems.

**MAJOR PRODUCT FEATURES:**

- 4U size
- EIA/ECA-310-E compliant mounting holes
- Robust 12 gauge steel construction
- Smooth black powder coat finish
- Mounting hardware and cable management included
- 267 N load rating (60 lb.)

**Flexible Mounting** — Unique design can be mounted below, flush or above cable tray in both parallel and perpendicular configurations.

**Flexible Cable Routing** — High capacity ¼-turn twist-lock cable managers lock into place quickly without use of screws or mounting tools and can be easily located to provide customized cable management.

**Floor Space Maximization** — Provides 4U of standard 19 inch rack mount space above cabinets and racks to maximize cabling density/minimize data center floor space needs.
**Ordering Information:**

CTR-(XX)-01 . . . . . . . . . . . . . . . . . . . . . 0.48m (19 in.) Cable Tray Rack, Black, #12-24.
Includes mounting hardware, 1/4 turn cable managers, ground lugs

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>w 2U</td>
</tr>
<tr>
<td>04</td>
<td>w 4U</td>
</tr>
<tr>
<td>06</td>
<td>w 6U</td>
</tr>
</tbody>
</table>

*Add “C” to end of part number for cage nut version (includes 16 M6 cage nuts)*

CTR-LRK . . . . . . . . . . . . . . . . . . . . . Ladder Rack Mounting Kit for Cable Tray Rack

**Mounting Examples:**

- Perpendicular to Tray (Below)
- Parallel to Tray (Flush)
- Parallel to Ladder Rack (Below)

*Other sizes available. Contact Customer Service for more information.*
WM Series Horizontal Cable Managers

The WM series cable managers provide increased strength and do not interfere with panels mounted above or below. They are a popular and economical solution for providing a clean and simple means of organizing small-to-large bundles of cables and patch cords.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WM-143-5</td>
<td>Horizontal cable manager with five S143 hangers, 1U</td>
</tr>
<tr>
<td>WM-144-5</td>
<td>Horizontal cable manager with five S144 hangers, 2U</td>
</tr>
<tr>
<td>WM-145-5</td>
<td>Horizontal cable manager with five S145 hangers, 2U</td>
</tr>
</tbody>
</table>

Note: 1U = 44.5mm (1.75 in.)

Cable Hangers

The cable hanger design features structural integrity and sleek appearance. These cable hangers are ideal for routing small to very large quantities of cables. The durable plastic design ensures reliability for any application.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Height</th>
<th>Width</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>S143*</td>
<td>44mm (1.7 in.)</td>
<td>38mm (1.5 in.)</td>
<td>89mm (3.5 in.)</td>
</tr>
<tr>
<td>S144*</td>
<td>87mm (3.4 in.)</td>
<td>57mm (2.2 in.)</td>
<td>74mm (2.9 in.)</td>
</tr>
<tr>
<td>S145*</td>
<td>87mm (3.4 in.)</td>
<td>57mm (2.2 in.)</td>
<td>125mm (4.9 in.)</td>
</tr>
<tr>
<td>S146</td>
<td>151mm (5.9 in.)</td>
<td>63mm (2.5 in.)</td>
<td>130mm (5.1 in.)</td>
</tr>
<tr>
<td>S147</td>
<td>151mm (5.9 in.)</td>
<td>63mm (2.5 in.)</td>
<td>130mm (5.1 in.)</td>
</tr>
</tbody>
</table>

* Add “-A” for optional adhesive backing.

Reusable Hook and Loop Cable Managers

These cable managers are simple, yet extremely effective when used to bundle cables. To accommodate different sized bundles, they are available in 152mm (6 in.), 305mm (12 in.), or 457mm (18 in.) lengths. They can be easily loosened and removed to service cable and then tightened and reinstalled when the cables are rebundled. The handy dispenser rolls/spools are neat, convenient and quick. Adjustable tension prevents “over-cinched” conditions. A mounting hole in each hook and loop manager enables the manager to be mounted to a wall or rack.

<table>
<thead>
<tr>
<th>Part#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCM-25-(XX)-01</td>
<td>Roll of 25 cable managers</td>
</tr>
<tr>
<td>VCM-250-(XX)-01</td>
<td>Spool of 250 cable managers</td>
</tr>
</tbody>
</table>

Use 1st (XX) to specify length:
- 06 = 152mm (6 in.), holds 51mm (2 in.) diameter cable bundle
- 12 = 305mm (12 in.), holds 102mm (4 in.) diameter cable bundle
- 18 = 457mm (18 in.), holds 153mm (6 in.) diameter cable bundle

Technical Tip!

Hook and loop cable managers are recommended as an alternate to plastic cable ties for the reduction of alien crosstalk in Category 6A UTP installations.
Stand-Off Brackets

Siemon hinged stand-off brackets can be mounted to a wall with the hinge on either side for convenient access to the back of the panel. The sides of the brackets will accept our S144 or S145 cable hangers for external cable management. The brackets accept any combination of Siemon patch panels and rack-mount cable management. Mounting hardware included.

Part #          Description
SBH-2           2U
SBH-3           3U
SBH-4           4U
SBH-6*          6U

height: See U information, width: 483mm (19 in.), depth: 152mm (6 in.)

*Add -2 for (3) independent 2U hinges (instead of a single 6U hinge).
Note: 1U = 44.5mm (1.75 in.)

Thermal Blanking Panels

Blank filler panels are ideal for installations where open or expansion rack space is to be covered. Aluminum panels are blank on one side and feature the Siemon logo on the other side.

Part #                Description
PNL-TBLNK010-1S       SnapFit™ Thermal blanking filler panel for 19 inch rack, 1U, square holes, black, plastic, package of 10
PNL-TBLNK100-1S       SnapFit™ Thermal blanking filler panel for 19 inch rack, 1U, square holes, black, plastic, box of 100
PNL-BLNK-(X)          Blank filler panel for 19 inch rack

Use (X) to specify rack mount space height of panel: 
1 = 1U, 2 = 2U, 3 = 3U, 4 = 4U
Note: 1U = 44.5mm (1.75 in.)

19 Inch Equipment Shelf

Siemon’s double-sided 19 inch equipment shelf is designed to support heavy equipment loads up to 68.1 kg (150 lb.). The shelf is designed for use with any 152mm (6 in.) deep rack and is secured to the front and rear of the rack channels. Shelf accommodates equipment up to 432mm (17 in.) wide.

Part #          Description
SH-D19-01       Double-sided equipment shelf for 152mm deep racks, solid, 3U
height: 133mm (5.2 in.)
width: 483mm (19 in.)
depth: 457mm (18 in.)

Single sided solid and vented equipment shelves are ideal for mounting devices in standard 19 inch racks and cabinets. Supports equipment up to 22.7kg (50 lb.) in weight and 438mm(19 in.) in width.

SH-S19-01        Single Sided Equipment Shelf - Solid -3U
height: 133mm (5.2 in.)
width: 483mm (19 in.)
depth: 381mm (15 in.)

Note: 1U = 44.5mm (1.75 in.)
RWM Series Horizontal Cable Managers

The multi-access horizontal cable managers are designed to provide both front and rear cable management in a compact, 1U space. The managers feature high capacity slots for entering and exiting cables, removable covers to conceal patch cords, and an innovative cable retention design to prevent patch cords from falling out when the covers are removed. The rear of the RWM-1 features attachments for using Siemon's hook and loop cable managers.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWM-1</td>
<td>Single-sided horizontal cable manager with cover</td>
</tr>
<tr>
<td>RWM-1DS</td>
<td>Double-sided horizontal cable manager with covers</td>
</tr>
</tbody>
</table>

Note: 1U = 44.5mm (1.75 in.)

S110®/S210® Horizontal Cable Managers

The S110/S210 cable managers provide an economical, superior cable management solution in a compact space. 1U and 2U size and large capacity provide excellent cable management for 19 inch rack mount installations.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S110-RWM-01</td>
<td>S110/S210 horizontal cable manager with covers, black, 1U</td>
</tr>
<tr>
<td>S110-RWM-02</td>
<td>S110/S210 horizontal cable manager with covers, white, 1U</td>
</tr>
<tr>
<td>S110-RWM2-01</td>
<td>S110/S210 horizontal cable manager with covers, black, 2U</td>
</tr>
<tr>
<td>S110-RWM2-02</td>
<td>S110/S210 horizontal cable manager with covers, white, 2U</td>
</tr>
</tbody>
</table>

Note: 1U = 44.5mm (1.75 in.)

Rear Cable Manager

Siemon rear cable manager can be mounted to the back side of a double-sided 19 inch rack, or can be mounted between a patch panel and the front face of the rack, using the same screws that hold the patch panel to the rack and the hex nuts provided. It provides strain relief anchor points and organisation of horizontal cables being routed to the back of the patch panel.

| WM-BK          | Rear cable manager with mounting screws and hex nuts |
VersaPOD®, V600™ and V800™ Cabinets

Including both the innovative VersaPOD family of data center solutions, V800 (800mm) and V600 (600mm) cabinets, Siemon’s comprehensive line of cabinets deliver the design flexibility and options to deploy the physical infrastructure you need.

In addition to the space saving, flexible VersaPOD and its Zero-U vertical cable management, patching and power distribution accessories, be sure to check out the additional innovations appearing in this section:

- SidePOD™ and Baffle — Unique VersaPOD accessories designed to support thermally efficient airflow for side-venting equipment such as the Cisco Nexus 7018 Series switches
- Vertical Exhaust Ducts (Chimneys) — Compatible with VersaPOD (VP2), V800 (V82) and V600 (V62) cabinets, these chimneys bring VersaPOD’s thermal capacity to 13kW
- 42U Options — Full-featured VersaPOD cabinets are available in 42U and 45U sizes, and V800/V600 cabinets are available in 42U, 45U and 48U versions

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VersaPOD Zero-U Sliding Patch Panels ............ 10.3
VersaPOD Cable Management ...................... 10.4
VersaPOD End-of-Row Vertical Panels ............. 10.5
VersaPOD Zero-U Accessories .................... 10.6
Cabinet Accessories ............................... 10.7
VersaPOD SidePOD™ and Thermal Baffle ......... 10.8 - 10.9
V800 Cabinet and Accessories ................... 10.10 - 10.13
V600 Cabinet and Accessories ................... 10.14 - 10.15
VersaPOD® Features and Benefits

Siemon’s VersaPOD enables a completely new and efficient approach to your physical data center infrastructure. By leveraging the vertical space between bayed cabinets and at the end of row for patching, power distribution and cable management, the VersaPOD frees critical horizontal space for active equipment, providing improved air flow while optimising data center floor space.

The VersaPOD’s innovative Zero-U vertical patch panels (VPP’s) dramatically simplify even the most dense patching needs while its vertical patching channels (VPC) offer a clean, orderly and easy method of high-density cable routing.

All of the VersaPOD’s unique features are integrated into a full-featured modular enclosure that is equally effective as a standalone cabinet or in a multi-unit bayed configuration, offering a simple, scalable expansion path in any data center.

**Integration** — In addition to patching, the VersaPOD's Zero-U vertical space can be leveraged with integrated cable management options and dual-hinged door to offer a high capacity and concealable pathway for cable routing and slack management.

**End of Row** — End of row vertical panels offer additional cable management channels or up to 8U additional Zero-U mounting space (4U in front and 4U in back at each end).

**Vertical Patching** — Vertical copper and fiber patch panels provide up to 24U (12U at front and 12U at rear) of Zero-U vertical patching space between every two cabinets. These panels conveniently slide forward providing access to the connections at the rear of the panel.

**Cable Management** — Vertical cable management fingers can be mounted alongside each VPP or VPC to facilitate routing of copper or fiber jumpers between patching fields as well as cabinet to cabinet connections.

**Dual Hinged Doors** — Dual hinged front and quad hinged rear doors open from either the left or right and are easily removed. Rear split doors can be hinged open in either direction providing direct access to vertical spaces. For standalone cabinets or end units, side panels can be removed for full side access.

www.siemon.com
VersaPOD® Cabinets

The VersaPOD cabinet is designed to integrate with Siemon’s comprehensive assortment of Zero-U vertical and horizontal cable management accessories, Zero-U vertical patch panels and thermal management products, offering multiple top and bottom cable access points and mounting provisions for fans, brushguards and vertical exhaust ducts. The VersaPOD cabinet is available in both 42U and 45U sized and in 1000mm (39.4 in.) and 1200mm (47.2 in.) depths and a wide array of door, side panel and lock options.

Part # Description
VP A-DRA-1-(XX) Full vented door, dual handle with standard keyed lock
VP A-DRB-1-(XX) Split vented door, dual handle with standard keyed lock, (Set of 2)
VP A-DRC-1-(XX) Split solid door, dual handle with standard keyed lock, (Set of 2)
VP1A-S-1-(XX) 1000mm (39.4 in.) locking side panel kit
VP2A-S-1-(XX) 1200mm (47.2 in.) locking side panel kit

Use (XX) to specify height. 42 = 42U, 45 = 45U

VersaPOD Cabinet Doors and Panels

Part # Description
VPA-DRA-1-(XX) Full vented door, dual handle with standard keyed lock
VPA-DRB-1-(XX) Split vented door, dual handle with standard keyed lock, (Set of 2)
VPA-DRC-1-(XX) Split solid door, dual handle with standard keyed lock, (Set of 2)
VP1A-S-1-(XX) 1000mm (39.4 in.) locking side panel kit
VP2A-S-1-(XX) 1200mm (47.2 in.) locking side panel kit

Vertical Exhaust Duct (Chimney)

Part # Description
VP-DUCT1 Vertical Exhaust Duct,
523 x 653 x 516 - 923mm, (20.5 x 25 x 20 - 36 in.) Black
VP-DUCT2 Vertical Exhaust Duct,
523 x 653 x 912 - 1320mm, (20.5 x 25 x 35 - 52 in.) Black

*Note: Chimney compatible with 1200mm VersaPOD (VP2), V800 (V82) and V600 (V62) cabinets only. Solid doors recommended for use with chimneys.

Includes: 4 leveling feet, 50 cage nuts and 4 stabilizing brackets
# VersaPOD® Zero-U Sliding Patch Panels

## 42U Triplex Zero-U Sliding Vertical Patch Panels

<table>
<thead>
<tr>
<th>Part#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VP-VP3U-1-42</td>
<td>Vertical 19 inch Panel, 3U Mounts up to 3U of standard 19 inch panels or PDUs in vertical orientation</td>
</tr>
<tr>
<td>VP-VPTM-1-42</td>
<td>TERA® MAX® Vertical Patch Panel 48 ports, supports all Category 5e and Category 6 MAX and Z-MAX®, Category 6A UTP and shielded Z-MAX, TERA outlets and MAX fiber adapters (port spacing compatible for Z-MAX 6A UTP)</td>
</tr>
<tr>
<td>VP-VPTMR-1-42</td>
<td>TERA-MAX-RIC Vertical Patch Panel 48 Ports, supports all Category 5e and Category 6 MAX and Z-MAX, Category 6A shielded Z-MAX outlets TERA® outlets and MAX fiber adapters (port spacing not compatible for Z-MAX 6A UTP) - 4 fiber RIC adapter mounting spaces for mounting RIC adapter plates or fiber Plug and Play modules</td>
</tr>
<tr>
<td>VP-VPR-1-42</td>
<td>RIC Vertical Patch Panel 12 RIC adapter mounting spaces for mounting RIC fiber adapter plates or fiber Plug and Play modules</td>
</tr>
</tbody>
</table>

**Note:**
1. VPP’s/VPCs can be mounted vertically at the front and/or rear of 2 bayed cabinets or between a VersaPOD cabinet and SidePOD®
2. VPP’s/VPCs are required to fully populate 42U Zero-U space

## 45U Duplex Zero-U Sliding Vertical Patch Panels

<table>
<thead>
<tr>
<th>Part#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VP-VPP-6U</td>
<td>Vertical 19 inch Panel, 6U Mounts up to 6U of standard 19 inch panels in Zero-U vertical orientation</td>
</tr>
<tr>
<td>VP-VPP-TM</td>
<td>TERA-MA Patch Panel 96 Ports, supports all Category 5e Category 6, Category 6A UTP MAX and Z-MAX outlets, Category 6A shielded Z-MAX, TERA outlets and MAX fiber adapters (Port spacing compatible with Z-MAX 6A UTP)</td>
</tr>
<tr>
<td>VP-VPP-TMRIC</td>
<td>TERA-MAX-RIC Vertical Patch Panel 96 Ports, supports all Category 5e and Category 6 UTP MAX and Z-MAX, Category 6A shielded Z-MAX outlets, TERA outlets an MAX fiber adapters. (Not for use w/Z-MAX 6A UTP) 6 fiber RIC adapter mounting spaces for mounting RIC adapter plates or fiber Plug and Play modules</td>
</tr>
</tbody>
</table>

**Note:**
1. VPP’s/VPCs can be mounted vertically at the front and/or rear of 2 bayed cabinets or between a VersaPOD cabinet and SidePOD®
2. VPP’s/VPCs are required to fully populate 45U Zero-U space
### VersaPOD® Zero-U Cable Management

#### 42U Triplex Zero-U Vertical Cable Management

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VP-VPC6-1-42</td>
<td>Vertical Patching Channel includes back plate, 152mm (6 in.) cable management fingers and cover</td>
</tr>
<tr>
<td>VP-FGR6-1-42</td>
<td>152mm (6 in.) Vertical Cable Management Fingers (set of 2) Can be mounted alongside each VPP and/or VPC to facilitate routing of copper and fiber jumpers between patching fields as well as cabinet to cabinet connections</td>
</tr>
<tr>
<td>VP-CVR-1-42</td>
<td>Vertical Cover Hinged cover used in conjunction with Vertical Cable Management fingers to conceal patching areas</td>
</tr>
<tr>
<td>VP1A-TRAY-1-42</td>
<td>Vertical Cable Management Tray for 42U VP1A Cabinets Manages/secures cable between cabinets, use 4 trays to isolate airflow between VP1A cabinets</td>
</tr>
<tr>
<td>VP2A-TRAY-1-42</td>
<td>Vertical Cable Management Tray for 42U VP2A Cabinets Manages/secures cable between cabinets, use 4 trays to isolate airflow between VP2A cabinets</td>
</tr>
</tbody>
</table>

**Note:**
(3) VPPs/VPCs can be mounted vertically at the front and/or rear of 2 bayed cabinets or between a VersaPOD cabinet and SidePOD
(3) VPPs/VPCs are required to fully populate 42U Zero-U space

#### 45U Duplex Zero-U Vertical Cable Management

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VP-VPC6-1-45</td>
<td>Vertical Patching Channel includes back plate, 152mm (6 in.) cable management fingers and cover</td>
</tr>
<tr>
<td>VP-FGR6-1-45</td>
<td>152mm (6 in.) Vertical Cable Management Fingers (set of 2) Can be mounted alongside each VPP and/or VPC to facilitate routing of copper and fiber jumpers between patching fields as well as cabinet to cabinet connections</td>
</tr>
<tr>
<td>VP-CVR-1-45</td>
<td>Vertical Cover Hinged cover used in conjunction with Vertical Cable Management fingers to conceal patching areas</td>
</tr>
<tr>
<td>VP1A-TRAY-1-45</td>
<td>Vertical Cable Management Tray for 45U VP1A Cabinets Manages/secures cable between cabinets, use 4 trays to isolate airflow between VP1A cabinets</td>
</tr>
<tr>
<td>VP2A-TRAY-1-45</td>
<td>Vertical Cable Management Tray for 45U VP2A Cabinets Manages/secures cable between cabinets, use 4 trays to isolate airflow between VP2A cabinets</td>
</tr>
</tbody>
</table>

**Note:**
(2) VPPs/VPCs can be mounted vertically at the front and/or rear of 2 bayed cabinets or between a VersaPOD cabinet and SidePOD
(2) VPPs/VPCs are required to fully populate 45U Zero-U space
VersaPOD® End-of-Row Vertical Panels

42U Triplex End of Row Zero-U Panels

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VP-VP1U-1-42</td>
<td>Vertical 19 inch Panel, 1U Mounts 1U of standard 19 inch rack mount products</td>
</tr>
<tr>
<td>VP-VWM-1-42</td>
<td>Vertical Wire Manager Panel Includes cable management lances as well as features to allow use of Siemon's ¼-turn cable management accessories</td>
</tr>
<tr>
<td>VP-BLNK1-1-42</td>
<td>Vertical Blanking Panel Used to block off unused spaces to prevent re-circulation of air</td>
</tr>
</tbody>
</table>

3 Vertical Panels can be mounted vertically at the front and/or rear on each side of a single cabinet or at each end of multiple bayed cabinets.

45U Duplex End of Row Zero-U Panels

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VP-VPP-2U</td>
<td>Vertical 19 inch Panel, 3U Mounts up to 3U of standard 19 inch rack mount products</td>
</tr>
<tr>
<td>VP-VWM</td>
<td>Vertical Wire Manager Panel, end-of-row Includes cable management lances as well as features to allow use of Siemon's ¼-turn cable management accessories</td>
</tr>
<tr>
<td>VP-BLNK1</td>
<td>Vertical Blanking Panel, end-of-row Used to block off unused spaces to prevent re-circulation of air</td>
</tr>
</tbody>
</table>

2 Vertical Panels can be mounted vertically at the front and/or rear on each side of a single cabinet or at each end of multiple bayed cabinets.
## VersaPOD® Zero-U Accessories

### Full Height Zero-U PDU Mounting Brackets

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>
| VP A-PDU-F1-1 | Front-facing, Single PDU Mounting Bracket  
SUPPORTS MOUNTING OF (1) FRONT-FACING PDU IN FULL HEIGHT ZERO-U SPACES FOR END OF ROW APPLICATIONS |
| VP A-PDU-F2-1 | Front-facing, Dual PDU Mounting Bracket  
SUPPORTS MOUNTING OF (2) FRONT-FACING PDU'S IN FULL HEIGHT ZERO-U SPACES BETWEEN BAYED CABINETS |
| VP A-PDU-S2-1 | Side-facing, Dual PDU Mounting Bracket. Supports mounting of (2) side-facing PDU's. Can be used in either end of row or in full height Zero-U spaces between bayed cabinets |

*Note: Compatible with 42U and 45U VersaPODs.*

### Zero-U PDU Cable Trough

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>
| VP A-SPAN-1 | Adjustable Depth Cable Trough  
USED TO ROUTE CABLES BETWEEN THE FRONT AND REAR OF CABINETS. MOUNTS BETWEEN VERTICAL PATCHING CHANNELS MOUNTED TO FRONT AND REAR OF CABINETS |

### Zero-U Blanking Panels

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>
| VP BLNK-1-42 | Vertical Blanking Panel  
USED TO ISOLATE AIRFLOW IN UNUSED ZERO-U SPACES WITHIN 42U CABINETS |
| VP BLNK    | Vertical Blanking Panel  
USED TO ISOLATE AIRFLOW IN UNUSED ZERO-U SPACES WITHIN 45U CABINETS |

*Note:*

- (2) VPP's/VPCs can be mounted vertically at the front and/or rear of 2 bayed cabinets or between a VersaPOD cabinet and SidePOD
- (2) VPP's/VPCs are required to fully populate 45U Zero-U space
**VersaPOD® Cabinet Accessories**

### Accessories

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VP-R1-(XX)</td>
<td>VersaPOD Equipment Mounting Rails (set of 2), Black</td>
</tr>
<tr>
<td></td>
<td>Use (XX) to specify height; 42 = 42U, 45 = 45U</td>
</tr>
<tr>
<td>VP-FAN</td>
<td>Top-Mount Cooling Fan Panel - 3 Fans x 110CFM, 120VAC w/ NEMA 5-15P plug</td>
</tr>
<tr>
<td>VP-FAN-220</td>
<td>Top-Mount Cooling Fan Panel - 3 Fans x 110CFM, 220VAC w/ C13 plug</td>
</tr>
<tr>
<td>VP-T3</td>
<td>Brush Guard, Large - For large center top panel cable openings</td>
</tr>
<tr>
<td>VP-BRUSH</td>
<td>Brush Guard, Small - For small perimeter top panel cable openings</td>
</tr>
<tr>
<td>VP-BAY2</td>
<td>VersaPOD Baying Kit - Secures (2) VersaPOD cabinets together</td>
</tr>
<tr>
<td>VA-VP-A-BAY-1</td>
<td>VersaPOD-to-V600/V800 Baying Kit - Secures (1) VersaPOD cabinet to (1) V600 or V800 cabinet</td>
</tr>
<tr>
<td>VP-GRD</td>
<td>Grounding Kit - Includes ground bar, ground wire, mounting hardware and accessories (capacity to support all required grounding connections for a single cabinet)</td>
</tr>
<tr>
<td>RS-VCM</td>
<td>¼-turn Hook and Loop Cable Managers (box of 10)</td>
</tr>
<tr>
<td></td>
<td>Can be installed in Vertical Cable Management Tray, Vertical Patching Channel and End of Row Vertical Wire Manager</td>
</tr>
<tr>
<td>VP-SPL</td>
<td>¼-Turn Fiber Management Spool (bag of 5)</td>
</tr>
<tr>
<td></td>
<td>Can be installed in Vertical Patching Channel and End of Row Vertical Wire Manager</td>
</tr>
<tr>
<td>VP-143</td>
<td>¼-Turn D-Ring Cable Manager (box of 10), 88.9 x 44.5mm (3.5 x 1.75 in.)</td>
</tr>
<tr>
<td></td>
<td>Can be installed in Vertical Cable Management Trays only</td>
</tr>
<tr>
<td>VP-145</td>
<td>¼-Turn D-Ring Cable Manager (box of 10), 127.0 x 88.9mm (5 x 1.75 in.)</td>
</tr>
<tr>
<td></td>
<td>Can be installed in Vertical Management Trays only</td>
</tr>
<tr>
<td>HCM-4-(X)U</td>
<td>RouteIT™ 19 inch Horizontal Cable Manager with 102mm (4 in.) Fingers</td>
</tr>
<tr>
<td></td>
<td>Use (X) to specify height; 1 = 1U, 2 = 2U, 4 = 4U</td>
</tr>
<tr>
<td>HCM-6-(X)U</td>
<td>RouteIT 19 inch Horizontal Cable Manager with 152mm (6 in.) Fingers</td>
</tr>
<tr>
<td></td>
<td>Use (X) to specify height; 1 = 1U, 2 = 2U, 4 = 4U</td>
</tr>
<tr>
<td>PNL-TBLNK010-1S</td>
<td>19 inch SnapFit™ Thermal Blanking Panel, 1U (box of 10)</td>
</tr>
<tr>
<td>PNL-TBLNK100-1S</td>
<td>19 inch SnapFit™ Thermal Blanking Panel, 1U (box of 100)</td>
</tr>
<tr>
<td>PNL-BRSH-1</td>
<td>19 inch Brush Guard Panel, 1U</td>
</tr>
</tbody>
</table>
VersaPOD® (VP2A) SidePOD™ and Thermal Baffle

Siemon’s SidePOD and Thermal Baffle solution are designed to support side-to-side ventilated active equipment such as the Cisco Nexus® 7018 Series Switches. The SidePOD is an optional add on to Siemon’s 1200mm deep (47.2 in.) VersaPOD (VP2A) cabinets and creates the necessary clearance for proper airflow to the switch. Optional baffles may be mounted within the SidePOD to properly route cold air from the front of the cabinet to the input side of the switch as well as route exhaust from the output side of the switch to be vented into the hot aisle. The baffles can also be mounted in the Zero-U space between adjacent, bayed VP2A cabinets.

In addition to providing a cooling platform, the SidePOD allows full size Zero-U panels to be used in End of Row applications. This includes up to 12U of vertical patching and high capacity vertical cable management with hinged covers.

- **Shared Use of VP2A Side Panels** — The SidePOD is compatible with VP2A side panels allowing VersaPOD panels to be transitioned to the SidePOD when added to end of row installations
- **Single Finger Door Operation** — The SidePOD door features a single, lockable slam latch that allows the door to be opened or closed with a single finger
- **End of Row Capacity Increases** — When using the SidePOD, cable management and patching options are increased allowing full size Zero-U accessories
- **Reversible Baffle Design** — Baffles can be installed in either orientation to properly route either cold air input or hot air exhaust
- **Zero-U Modularity** — Even with a baffle installed, the balance of Zero-U space can be fully utilized for patching or cable management
- **Cable Access Openings** — Multiple openings in the lid accept optional brush guards to provide cable access to the Zero-U space from overhead distribution systems
- **Split Baffle Design** — Allows the baffles to be nested in the Zero-U space enabling placement of side venting equipment in adjacent cabinets
Ordering Information:

SidePOD™

Part # | Description
---|---
VP2A-SPA1-(XX) | VP2A SidePOD with 2 Vented Doors, Black
Includes 2 leveling feet, 2 sets of baying brackets, 1 bonding conductor and assembly hardware (ships unassembled)

VP2A-SPAC1-(XX) | VP2A SidePOD with 1 Vented Door and 1 Solid Door, Black
Includes 2 leveling feet, 2 sets of baying brackets, 1 bonding conductor and assembly hardware (ships unassembled)

Use (XX) to specify height. 42 = 42U, 45 = 45U

Zero-U Baffle

Part # | Description
---|---
VP2A-BFL-S | Zero-U Baffle, Black
Includes mounting hardware

VP2A-BFP-1-42 | Zero-U Baffle Filler Panel, Black
Blank panel used to fill gap between baffle and adjacent triplex Zero-U space on 42U cabinets

SidePOD Product Specifications

<table>
<thead>
<tr>
<th></th>
<th>42U: 2016mm (79 in.)</th>
<th>45U: 2150mm (85 in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>140mm (5.5 in.)</td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>1200mm (47.2 in.)</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>26.2 kg (57.5 lbs.)</td>
<td></td>
</tr>
<tr>
<td>Base Type</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Black (RAL 9005)</td>
<td></td>
</tr>
<tr>
<td>Front Doors</td>
<td>Perforated, keyed lock</td>
<td></td>
</tr>
<tr>
<td>Rear Doors</td>
<td>Perforated, keyed lock</td>
<td></td>
</tr>
<tr>
<td>% Door Perforation</td>
<td>71%</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>CRS of varying thickness</td>
<td></td>
</tr>
<tr>
<td>Finish</td>
<td>Textured powder coat</td>
<td></td>
</tr>
<tr>
<td>Standard Compliance</td>
<td>UL 60950-1 Ed2.0, CSA C22.2 N0. 60950-1-07</td>
<td></td>
</tr>
<tr>
<td>Top Cable Access Openings</td>
<td>3 openings, 280 x 45mm (11 x 1.7 in.)</td>
<td></td>
</tr>
</tbody>
</table>
V800™ Cabinet

Siemon’s V800 cabinets provide a robust, cost-effective enclosure solution that provides valuable Zero-U space on each side of the equipment rails for cable management, PDU mounting or connectivity on both the front and rear of the cabinet. The V800 cabinet is ideal for high-density data center environments, enabling increased cabling and equipment density while providing excellent accessibility and thermal efficiency. All of these features are integrated into a full-featured modular enclosure that is equally effective as a standalone network and server cabinet or in a multi-unit bayed configuration, offering a simple, scalable expansion path in any data center.

- **Lightweight Stability** — Design provides an extremely stable, high-capacity cabinet without excessive weight.
- **Zero-U Modularity** — Half-height Zero-U panels can be mounted in any of the four quadrants (top left, bottom left, top right and bottom right) of both the front and rear of the cabinet.
- **Full Accessibility Doors** — Quick release, field reversible single piece front and split rear doors.
- **Integrated Side Panel Grounding** — Spring loaded grounding clips eliminate need for dedicated grounding conductors.
- **High-Flow Doors** — Contoured high density perforated door provides up to 88% perforation exceeding major IT equipment air flow requirements.
- **Fully Adjustable Equipment Rails** — Can be readily configured to support any range of equipment depths.
### Ordering Information:

<table>
<thead>
<tr>
<th>Cabinet Depth</th>
<th>1 = 1000mm (39.4 in.)</th>
<th>2 = 1200mm (47.2 in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Door</td>
<td>A = Full Vented</td>
<td>B = Split Vented</td>
</tr>
<tr>
<td></td>
<td>C = Split Solid</td>
<td></td>
</tr>
<tr>
<td>Caster Option</td>
<td>1 = No Casters</td>
<td>2 = Casters</td>
</tr>
<tr>
<td>Rear Door</td>
<td>A = Full Vented</td>
<td>B = Split Vented</td>
</tr>
<tr>
<td></td>
<td>C = Split Solid</td>
<td></td>
</tr>
<tr>
<td>Side Panels</td>
<td>0 = No Side Panels</td>
<td>1 = 1 Side Panel</td>
</tr>
<tr>
<td></td>
<td>2 = Side Panels</td>
<td></td>
</tr>
</tbody>
</table>

**Cabinet Height**

- 42U = 420 mm (16.53 in.)
- 45U = 450 mm (17.72 in.)
- 48U = 480 mm (18.90 in.)

Includes: 4 leveling feet, 50 M6 cage nuts and 2 stabilizing brackets

---

### V800 Cabinet Product Specifications

<table>
<thead>
<tr>
<th>Height*</th>
<th>42U: 2013mm (79.25 in.)</th>
<th>45U: 2146mm (84.5 in.)</th>
<th>48U: 2280mm (89.75 in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>800mm (31.5 in.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depth - External (Door-to-Door)</td>
<td>V81A: 1000mm (39.37 in.)</td>
<td>V82A: 1200mm (47.2 in.)</td>
<td></td>
</tr>
<tr>
<td>Depth - Usable (Rail to Rail Max.)</td>
<td>V81A: 806mm (31.8 in.)</td>
<td>V82A: 1006 mm (39.6 in.)</td>
<td></td>
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<tr>
<td>Weight**</td>
<td>42U V81A: 111kg</td>
<td>V82A: 126kg (270 lbs.)</td>
<td>45U V81A: 116kg</td>
</tr>
<tr>
<td>Load Rating</td>
<td>Static: 1361kg (3000 lbs.)</td>
<td>Dynamic: 1021kg (2250 lbs.)</td>
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</tr>
<tr>
<td>Base Type</td>
<td>Open</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Black (RAL 9011)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Door Perforation</td>
<td>Full door: 89%, Split door: 85%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U Space Identification</td>
<td>Yes (bottom-to-top)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lid Cable Access Openings</td>
<td>V81A: 3 large; (4) 63x406mm integrated brush guards (2.5 in. x 16 in.)</td>
<td>V82A: 4 large; (4) 63x406mm integrated brush guards (2.5 in. x 16 in.)</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>CRS of varying thickness</td>
<td></td>
<td></td>
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<tr>
<td>Finish</td>
<td>Textured Powder Coat</td>
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<tr>
<td>Standards Compliance</td>
<td>UL 60950-1 Ed2.0, EIA/ECA-310-E, IP20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Nominal height with stabilizing brackets
** Does not include packaging
**V800™ Cabinet Zero-U Accessory Ordering Information**

**V8A-VPC4-1-(XX).................**
Half-height Zero-U Vertical Patching Channel with 4 in. (102mm) Fingers and Cover

**V8A-VPC6-1-(XX)..................**
Half-height Zero-U Vertical Patching Channel with 6 in. (152mm) Fingers and Cover

**V8A-VPC145-1-(XX)..............**
Half-height Zero-U Vertical Patching Channel with D-Ring Managers

**V8A-BRSH-1-(XX)................**
Half-height Zero-U Vertical Brush Guard Panel

**V8A-VPP2U-1-(XX)...............**
Half-height Zero-U Vertical Patch Panel, 2U
Mounts 2U of standard 19 in. panels in vertical orientation
Includes (8) M6 cage nuts

**V8A-PLNK-1-(XX)................**
Half-height Zero-U Vertical Blanking Panel
Used to block unused Zero-U spaces to prevent re-circulation of air

Use (XX) to specify cabinet height: 42 = 42U, 45 = 45U, 48 = 48U

**V8A-PDU-F1-1-(XX)................**
Full-height Zero-U Vertical PDU Panel
Full length brackets support tool-less mounting of one (1) vertical rack mount PDU with a maximum width of 86.4mm (3.4 in.) and 1.24m (48.8 in.) 1.56m (61.41 in.) or 1.65m (65 in.) O.C. mounting buttons

Use (XX) to specify cabinet height: 42 = 42U, 45 = 45U, 48 = 48U
### Cabinet Accessory Ordering Information

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VPA-SPAN-1</td>
<td>Adjustable Depth Cable Trough, Extends from 556mm (21.9 in.) to 911mm (35.9 in.), 81mm (3.2 in.) wide: 65mm (2.6 in.) high, Used to route cables between the front and rear of cabinets. Mounts between Vertical Patching Channels mounted to front and rear of cabinets.</td>
</tr>
<tr>
<td>V8A-LD-1</td>
<td>V800 Lid Divider Panel, set of 2, 107mm (4.2 in.) high, Used to create cable pathways on top of bayed cabinets</td>
</tr>
<tr>
<td>V8A-DRA-1-(XX)</td>
<td>V800 Full Vented Door, Black</td>
</tr>
<tr>
<td>V8A-DRB-1-(XX)</td>
<td>V800 Split Vented Doors, Black, set of 2</td>
</tr>
<tr>
<td>V8A-DRC-1-(XX)</td>
<td>V800 Split Solid Doors, Black, set of 2</td>
</tr>
<tr>
<td>V1A-S-1(XX)</td>
<td>V600/V800 1000mm Split Side Panels, Black, set of 2</td>
</tr>
<tr>
<td>V2A-S-1(XX)</td>
<td>V600/V800 1200mm Split Side Panels, Black, set of 2</td>
</tr>
<tr>
<td>V8A-R-1-(XX)</td>
<td>V800 Equipment Mounting Rail, Black, set of 2</td>
</tr>
</tbody>
</table>

*Use (XX) to specify cabinet height: 42 = 42U, 45 = 45U, 48 = 48U*
V600™ Cabinet

The V600 cabinet provides a robust, cost-effective enclosure solution that is ideal for use in conjunction with VersaPOD® or V800™ data center cabinets. While not compatible with VersaPOD or V800 Zero-U vertical patching and cable management accessories, it shares a common appearance for standard cabinet applications and is ideal for use as a server cabinet.

- **Lightweight Stability** — Design provides an extremely stable, high-capacity cabinet without excessive weight.
- **High-Flow Doors** — Contoured high density perforated door provides up to 86% perforation exceeding major IT equipment air flow requirements.
- **Enhanced Side Access** — Split level side panels provide convenient access to installed equipment.
- **Full Accessibility Doors** — Quick release, field reversible single piece front and split rear doors.
- **Flexible Mounting Options** — Fully adjustable mounting rails can be readily configured to support any range of equipment depths.
- **Consistent Aesthetics** — The V62A cabinet is exactly 1200mm (47.2 in.) deep, allowing for full access to adjacent tiles immediately in front or in back of placed cabinets.
- **Thermally Efficient** — Compatible with VersaPOD thermal management options including exhaust fans and brush guards. V62A cabinet is compatible with VersaPOD Vertical Exhaust Ducts.

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V600 Cabinet Accessories

Ordering Information:

<table>
<thead>
<tr>
<th>V6(X)-A-(X)(X)(X)-(X)</th>
<th>V600 Cabinet, black</th>
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</thead>
<tbody>
<tr>
<td>Height*</td>
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<tr>
<td>42U: 2016mm (79.4 in.)</td>
<td></td>
</tr>
<tr>
<td>45U: 2150mm (84.6 in.)</td>
<td></td>
</tr>
<tr>
<td>48U: 2280mm (89.7 in.)</td>
<td></td>
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<tr>
<td>Weight **</td>
<td></td>
</tr>
<tr>
<td>42U V61A: 97kg (214 lbs.)</td>
<td></td>
</tr>
<tr>
<td>V62A: 112kg (247 lbs.)</td>
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</tr>
<tr>
<td>45U V61A: 102kg (224 lbs.)</td>
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</tr>
<tr>
<td>V62A: 117kg (258 lbs.)</td>
<td></td>
</tr>
<tr>
<td>48U V61A: 107kg (236 lbs.)</td>
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</tr>
<tr>
<td>V62A: 122kg (269 lbs.)</td>
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</tr>
<tr>
<td>Base Type</td>
<td>Open</td>
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<tr>
<td>Color</td>
<td>Black (RAL 9011)</td>
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<tr>
<td>% Door Perforation</td>
<td>Full door: 86%, Split door: 80%</td>
</tr>
<tr>
<td>U Space Identification</td>
<td>Yes</td>
</tr>
<tr>
<td>Lid Cable Access</td>
<td>V61A: 4 (small); 1 (large)</td>
</tr>
<tr>
<td>Openings</td>
<td>V62A: 3 (small); 3 (large)</td>
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<tr>
<td>Material</td>
<td>CRS of varying thicknesses</td>
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<td>Finish</td>
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<tr>
<td>Standards Compliance</td>
<td>UL 60950-1 Ed.2, EIA/ECMA-310-E, IP20</td>
</tr>
</tbody>
</table>

* Nominal height with adjustable leveling feet or castors
** Does not include packaging

V600 Cabinet Accessories

VP-DUCT1* . . . VersaPOD Vertical Exhaust Duct, 523mmx653mmx516-923mm (20.6x25.7x20-36 in.), Black
VP-DUCT2* . . . VersaPOD Vertical Exhaust Duct, 523mmx653mmx912-1320mm (20.6x25.7x36-52 in.), Black
V6-PDU-1-(XX) . . . V600 Vertical PDU/Cable Management Bracket, Black, (set of 2)
Supports tool-less mounting of up to (2) vertical rack mount PDU’s
V6A-R-1-(XX) . . . . V600 Mounting Rails (set of 2), Black
VP-FAN . . . . . . . . . Top-Mount Cooling Fan Panel, 3 Fans x 110CFM, 120VAC w/NEMA 5-15P plug
VP-FAN-220 . . . . . . Top-Mount Cooling Fan Panel, 3 Fans x 110CFM, 220VAC w/C13 plug
VP-T3 . . . . . . . . . . Brush Guard, Large for large center top panel cable openings
VP-BRUSH . . . . . . . Brush Guard, Small for small perimeter top panel cable openings
V-W . . . . . . . . . . . V600 Casters (set of four)
VA-VPA-BAY-1 . . VersaPOD-to-V600 Baying Kit secures (1) VersaPOD cabinet to (1) V600 cabinet
VP-GRD . . . . . . . . . Grounding Kit - Includes ground bar, ground wire, mounting hardware, and accessories (capacity to support all required grounding connections for a single cabinet)
V6A-DRA-1-(XX) . . V600 Full Vented Door, Black
V6A-DRB-1-(XX) . . V600 Split Vented Doors (set of 2), Black
V6A-DRC-1-(XX) . . V600 Split Solid Doors (set of 2), Black
V1A-S-1-(XX) . . . V600/V800 1000mm (39.4 in.) Split Side Panels (set of 2), Black
V2A-S-1-(XX) . . . V600/V800 1200mm (47.2 in.) Split Side Panels (set of 2), Black

*Vertical exhaust ducts are compatible with V62A cabinets only. Solid doors should be specified for cabinets using exhaust ducts.
Data Center Power Distribution

With power costs continuing to rise, the ability to maximize a data center’s energy efficiency has rapidly become one of the most critical considerations for network infrastructure professionals. To meet this growing challenge, Siemon has developed intelligent power distribution solutions to improve energy efficiency.

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Intelligent Power Distribution Units . . . . . . . . . . . . . . . . . .11.1
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Monitored and Smart PDUs . . . . . . . . . . . . . . . . . . . . . .11.3
Switched and Managed PDUs . . . . . . . . . . . . . . . . . . . .11.4
Intelligent PDU Accessories . . . . . . . . . . . . . . . . . . . . .11.5
**Intelligent Power Distribution Units**

Siemon’s line of intelligent PDUs provide valuable energy consumption data while reliably delivering power to critical IT equipment. Each of our PDU families deliver real-time power information with varying degrees of intelligent functionality ranging from basic Metered units to full-featured Managed PDUs — providing multiple options based on the level of data and control requirements. Siemon’s intelligent PDUs may be used as stand-alone units, or they can communicate with third-party software through common open networking protocols. All of our network-capable intelligent PDUs also have the capacity to connect environmental sensors, allowing temperature, airflow, and humidity to be measured to further troubleshoot and optimize data center efficiency.

**PDU Families**

- Metered
- Monitored
- Smart
- Switched
- Managed

**FUNCTION**

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>METERED</th>
<th>MONITORED</th>
<th>SMART</th>
<th>SWITCHED</th>
<th>MANAGED</th>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>PDU-Level Monitoring</td>
<td>✓</td>
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<td>Remote Monitoring via Ethernet Port</td>
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<td>Environmental Sensor Ports</td>
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<td>Locking Outlets</td>
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<td>Outlet-Level Switching/ Control</td>
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<td></td>
<td>✓</td>
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</tbody>
</table>

**Configurations**

- Various plug inputs
- Single and 3-phase voltages
- Horizontal and Zero-U vertical styles
- 3m (9.8 ft.) cords (other lengths available on request)
- Test data included with each unit

**Mounting**

- Vertical PDUs mount via toolless button attachments and include a mounting bracket for additional flexibility
- Horizontal PDUs mount to standard EIA 19 in. configurations
Metered PDUs

Metered PDUs provide local visual monitoring capability through a built-in LED meter that displays real-time consumption data. Metered PDUs are a cost-effective alternative to monitored or switched PDUs when remote monitoring is not desired, while providing a more intelligent alternative to basic PDUs.

The 3 phase and 60A units measure current (amps) that scrolls through each phase

Single-phase PDUs measure power by scrolling through power factor, amps, volts and watts

Ordering Information

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<thead>
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<th>Mounting</th>
<th>Input Current</th>
<th>Input Voltage</th>
<th>Power</th>
<th>Input Plug</th>
<th>Output receptacles</th>
<th>Output receptacles</th>
<th>Length</th>
<th>Part Number</th>
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<tr>
<td>Vertical</td>
<td>20A x 2</td>
<td>120 dual input</td>
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<td>NEMA 5-20P</td>
<td>5-20R (20)</td>
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<td>1683mm</td>
<td>JTV02-AB20Z-K2A</td>
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<tr>
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<td>120 / 208 WYE</td>
<td>5.8kW</td>
<td>NEMA L21-20P</td>
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<td>120 / 208 WYE</td>
<td>5.8kW</td>
<td>NEMA L21-20P</td>
<td>C-13 (24)</td>
<td>C-19 (6)</td>
<td>1683mm</td>
<td>JTV11-BA24E-K1A</td>
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<tr>
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<td>20A, 3 phase</td>
<td>120 / 208 WYE</td>
<td>5.8kW</td>
<td>NEMA L21-20P</td>
<td>5-20R (24)</td>
<td>L6-20R (6)</td>
<td>1683mm</td>
<td>JTV11-AB24H-K1A</td>
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<tr>
<td>Vertical</td>
<td>30A</td>
<td>208</td>
<td>5kW</td>
<td>NEMA L6-30P</td>
<td>6-20R (24)</td>
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<td>Vertical</td>
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<td>5kW</td>
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<td>120 / 208 WYE</td>
<td>8.6kW</td>
<td>NEMA L21-30P</td>
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<td>C-19 (6)</td>
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<td>Vertical</td>
<td>16A, 3 phase</td>
<td>230/400 WYE</td>
<td>11.04kW</td>
<td>IEC 309 3P + N + E</td>
<td>C13 (24)</td>
<td>C-19 (6)</td>
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<td>230</td>
<td>7.36kW</td>
<td>IEC 309 2P + E</td>
<td>C-13 (24)</td>
<td>C-19 (6)</td>
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<td>JTV22-BA24E-K1A</td>
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<tr>
<td>Vertical</td>
<td>32A, 3 phase</td>
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<td>22.08kW</td>
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Monitored and Smart PDUs

Building on the functionality of the Metered family, Monitored and Smart PDUs enable different levels of remote monitoring of power consumption.

Monitored PDUs

Monitored PDUs collect data at an aggregate, device-level, generating a smaller quantity of information to simplify management.

Smart PDUs

Smart PDUs offer the highest level of monitoring by providing outlet-level data collection.

Ordering Information

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<tr>
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<th>Power</th>
<th>Input Plug</th>
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<th>Output Receptacles</th>
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<th>Part Number</th>
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</table>
Switched and Managed PDUs

In addition to power monitoring, switched and managed PDUs enable users to remotely control individual receptacles by allowing equipment to be restarted or remotely shut down.

Switched PDUs

Switched PDUs combine total PDU power monitoring with port-level switching. They are the ideal solution when port control is needed but only aggregate consumption data is desired.

Managed PDUs

Managed PDUs offer the highest level of control and monitoring by providing outlet-level monitoring and outlet-level switching.

The LCD display provides the ability to view power data locally. Display customisable data type, unit of measure and data outlet status.

Remote monitoring is established via an RJ45 port for network connection. Data can be downloaded in PDA, XML and SNMP formats.

Units have environmental monitoring capabilities through two RJ12 ports to support two separately purchased sensors directly, or up to 16 sensors connected via splitters.

User definable URL for each outlet

Sequential start up and shut down to manage loads

Ordering Information

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<th>Mounting</th>
<th>Input Current</th>
<th>Input Voltage</th>
<th>Power</th>
<th>Input PDU</th>
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## Accessories

### Environmental Sensors

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<th>Equipment</th>
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<td>7ENS-TEMPHAF</td>
<td>Temperature/ Airflow/ Humidity Sensor</td>
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<td>7ENS-WATER</td>
<td>Water Sensor</td>
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<td>7ENS-WKIT</td>
<td>Water Sensor Cable</td>
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## SPECIFICATIONS

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<tr>
<td>Emissions</td>
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<td>Cord Length</td>
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<td>Circuit breakers</td>
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<td>Storage Humidity</td>
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<td>Storage Elevation</td>
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<tr>
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</tr>
</tbody>
</table>

www.siemon.com
High Speed Interconnects

Siemon has developed a full offering of interconnect assemblies for ultra high-speed point-to-point applications. Supporting speeds up to 56Gb/s across an array of application standards, the line features QSFP+, SFP+, and CXP interfaces, as well as hybrid assemblies. Independently tested to be interoperable with most major equipment manufacturers, Siemon interconnects deliver cost-effective, flexible support for your high-speed, direct attach equipment connections.

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QSFP+ FDR Passive Copper Assemblies ......................................12.7 - 12.8
QSFP+ to 4 SFP+ Passive Copper Assemblies .............................12.9 - 12.10
CXP Copper Cable Assemblies ..................................................12.11 - 12.12
CXP to 3 QSFP+ Breakout Passive Copper Cable Assemblies .......12.13 - 12.14
40Gb/s QSFP+ Active Optical Cable Assemblies .........................12.15 - 12.16
56Gb/s QSFP+ Active Optical Cable Assemblies .........................12.17 - 12.18
SFP+ Copper Cable Assemblies

SFP+ copper cable assemblies from Siemon were developed specifically as a cost-effective and lower-power alternative to optical modules for short reach links in high-speed interconnect applications such as high-performance computing (HPC), enterprise networking and network storage markets. These assemblies support data transfer rates up to 10+ Gb/s per lane, meeting or exceeding current standards specifications.

These SFP+ fully-shielded assemblies combine twin-axial shielded cable configuration with robust die cast housings for enhanced support of high frequency data rates. These SFP+ assemblies are impedance matched to ensure interoperability and minimise EMI leakage through their fully-shielded design.

STANDARDS COMPLIANCE
- Electrical: SFF-8431*, SFF-8083
- Mechanical: SFF-8432
- EEPROM: SFF-8472
- RoHS

APPLICATIONS
- InfiniBand SDR, DDR and QDR
- Ethernet
- Fibre Channel 8, 10G
- FCoE 10G
- Networking
- Storage
- Hubs, switches, routers, servers, NICs

PCB Termination
- Laser stripped conductors
- Automated welding for unmatched consistency
- Welding results in less dielectric shrink-back than soldering
- Overmold provides additional strain relief to minimize pistoning

Enhanced EMI shielding for low emissions
Multiple conductor sizes available
Ultra low crosstalk for enhanced performance
Standard SFP+ latch interoperable with all compliant interfaces
Bend relief

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Product Information

PERFORMANCE SPECIFICATIONS

<table>
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<tr>
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<th>Plug</th>
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<tr>
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<tr>
<td>Current Rating</td>
<td>Latch</td>
</tr>
<tr>
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<td>Insertion Force</td>
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<tr>
<td>General</td>
<td>Withdrawal Force</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>Retention Force</td>
</tr>
<tr>
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<td>Durability</td>
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<td>Cable</td>
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<tr>
<td>Current Rating</td>
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<tr>
<td>General</td>
</tr>
<tr>
<td>Operating Temperature</td>
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<tr>
<td>Flammability Rating</td>
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<tr>
<td>Green Features</td>
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<tr>
<td>Shield</td>
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<td>Marking</td>
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<tbody>
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<tr>
<td>Green Features</td>
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<tr>
<td>Shield</td>
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<tr>
<td>Current Rating</td>
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<tr>
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<td>Operating Temperature</td>
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<td>Flammability Rating</td>
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<tr>
<td>Green Features</td>
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<td>Shield</td>
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<tr>
<td>SFP+ Passive Copper Cable Assembly, Double-ended, Black</td>
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<thead>
<tr>
<th>Part Number</th>
<th>Length</th>
<th>Gauge</th>
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<tbody>
<tr>
<td>SFPP30-01</td>
<td>1m (3.3 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>SFPP30-02</td>
<td>2m (6.6 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>SFPP30-03</td>
<td>3m (9.8 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>SFPP28-05</td>
<td>5m (16.4 ft.)</td>
<td>28</td>
</tr>
<tr>
<td>SFPP24-07</td>
<td>7m (23.0 ft.)</td>
<td>24</td>
</tr>
</tbody>
</table>

Note: Contact Customer Service for additional lengths and wire gauges.
Cisco Compatible SFP+ Twinax Copper Cables

Cisco Compatible SFP+ Twinax Copper direct-attach cables (DAC’s) are programmed specifically to work with Cisco equipment. When these cables are plugged into Cisco equipment they will not trigger the error message that a non-Cisco transceiver has been detected. These cables do not violate Cisco’s warranty.

Cisco Compatible SFP+ DAC’s from Siemon were developed specifically as a cost-effective and lower-power alternative to optical modules for short reach links in high-speed interconnect applications such as high-performance computing (HPC), enterprise networking including top-of-rack switching and network storage markets. The assemblies support data transfer rates up to 10+Gb/s per lane, meeting or exceeding current standards specifications.

These SFP+ fully-shielded assemblies combine twin-axial shielded cable configuration with robust die cast housings for enhanced support of high frequency data rates. These SFP+ assemblies are impedance matched to ensure interoperability and minimize EMI leakage through their fully-shielded design.

STANDARDS COMPLIANCE
- Electrical: SFF-8431, SFF-8083
- Mechanical: SFF-8432
- EEPROM: SFF-8472
- RoHS

APPLICATIONS
- All Cisco Network equipment having 10GBASE-CX4 ports including Catalyst and Nexus

PCB Termination

Laser stripped conductors
- Overmold provides additional strain relief to minimize pistoning

Automated welding for unmatched consistency
- Welding results in less dielectric shrink-back than soldering

Enhanced EMI shielding for low emissions
- Standard SFP+ latch interoperable with all compliant interfaces

Ultra low crosstalk for enhanced performance
- Multiple conductor sizes available

*Cisco* is a registered trademark of Cisco and/or its affiliates.
Product Information

**PERFORMANCE SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Electrical</th>
<th>Plug</th>
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<tbody>
<tr>
<td>Min. Dielectric Withstand Voltage</td>
<td>Backshell Material</td>
</tr>
<tr>
<td>300 VDC</td>
<td>Nickel-Plated Zinc Diecast</td>
</tr>
<tr>
<td>Insulation Resistance</td>
<td>Contact Material</td>
</tr>
<tr>
<td>1000 Mohms</td>
<td>PCB with Gold-Plated Pads</td>
</tr>
<tr>
<td>Current Rating</td>
<td>Latch</td>
</tr>
<tr>
<td>0.5 Amp Min/Signal Contact</td>
<td>Positive Latching w/ Pull</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>Insertion Force</td>
</tr>
<tr>
<td>-10 to 70° C (32 to 15° F)</td>
<td>30N (6.7 lbf.) Max</td>
</tr>
<tr>
<td>Flammability Rating</td>
<td>Withdrawal Force</td>
</tr>
<tr>
<td>UL 94 V-0</td>
<td>20N (4.5 lbf.) Max</td>
</tr>
<tr>
<td>Green Features</td>
<td>Retention Force</td>
</tr>
<tr>
<td>RoHS, Lead-Free</td>
<td>80N (20.2 lbf.) Max</td>
</tr>
<tr>
<td>Shield</td>
<td>Durability</td>
</tr>
<tr>
<td>Braid/Foil</td>
<td>50 Cycles Min</td>
</tr>
<tr>
<td>Marking</td>
<td></td>
</tr>
<tr>
<td>Mfg Name, Part#, Date Code</td>
<td></td>
</tr>
</tbody>
</table>

**Plug**

- Backshell Material: Nickel-Plated Zinc Diecast
- Contact Material: PCB with Gold-Plated Pads
- Latch: Positive Latching w/ Pull
- Insertion Force: 30N (6.7 lbf.) Max
- Withdrawal Force: 20N (4.5 lbf.) Max
- Retention Force: 80N (20.2 lbf.) Max
- Durability: 50 Cycles Min

**Cable**

- Conductor: Solid
- Wire Gauge: 30 AWG to 24 AWG
- Impedance: 100± 5 ohms
- Construction: Twinaxial
- Cable OD: 30 AWG = 4.5mm (0.18 in.)
  24 AWG = 6.2mm (0.24 in.)
- Jacket Type: PVC
- Bend Radius: 5X Cable OD

**Ordering Information:**

SFP+ Passive Copper Cable Assembly, Double-ended, Black

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Length</th>
<th>Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFPH10GBCU1MS</td>
<td>1m (3.3 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>SFPH10GBCU1.5MS</td>
<td>1.5m (4.9 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>SFPH10GBCU2MS</td>
<td>2m (6.6 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>SFPH10GBCU2.5MS</td>
<td>2.5m (8.2 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>SFPH10GBCU3MS</td>
<td>3m (9.8 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>SFPH10GBCU5MS</td>
<td>5m (16.4 ft.)</td>
<td>24</td>
</tr>
</tbody>
</table>

Note: Contact Customer Service for additional lengths and wire gauges.
QSFP+ Passive Copper Assemblies

Siemon QSFP+ Copper Cable assemblies were developed for high-density applications, offering a cost-effective, low-power option for high-speed data center interconnects. The QSFP+ form factor (Quad SFP+) can replace up to four standard SFP+ connections, providing greater density and reduced system cost. The direct-attach assemblies support emerging 40Gb/s applications and are available in standard lengths up to 6 meters (19.7 ft.) with longer custom lengths available.

STANDARDS COMPLIANCE
- Electrical: IBTA V2 Revision 1.3, IEEE 802.3ba
- SFF-8436, SFF-8636
- RoHS

APPLICATIONS
- InfiniBand 4X SDR, DDR, QDR
- Ethernet 10G, 40G
- Fibre Channel 10G, 40G, SAN
- RapidIO
- Myrinet 40G
- Rack-to-Rack, Shelf-to-Shelf Interconnect
- Networking
- Storage
- Hubs, switches, routers, servers

PCB Termination
- Laser stripped conductors
- Automated welding for unmatched consistency
- Overmold provides additional strain relief to minimize pistoning
- Welding results in less dielectric shrink-back than soldering
## Product Information

### PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Category</th>
<th>Specification</th>
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<tbody>
<tr>
<td><strong>Electrical</strong></td>
<td></td>
</tr>
<tr>
<td>Min. Dielectric Withstand Voltage</td>
<td>300 VDC</td>
</tr>
<tr>
<td>Insulation Resistance</td>
<td>1000 Mohms</td>
</tr>
<tr>
<td>Current Rating</td>
<td>0.5 Amp Min/Signal Contact</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0 to 70° C (32 to 158° F)</td>
</tr>
<tr>
<td>Flammability Rating</td>
<td>UL 94</td>
</tr>
<tr>
<td>Green Features</td>
<td>RoHS, Lead-Free</td>
</tr>
<tr>
<td>Shield</td>
<td>Braid/Foil</td>
</tr>
<tr>
<td>Marking</td>
<td>Mfg Name, Part#, Date Code</td>
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### Ordering Information:

**QSFP+ to QSFP+ Passive Copper Cable Assemblies**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Length</th>
<th>Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>QSFP30-00.5</td>
<td>0.5m (1.6 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>QSFP30-01</td>
<td>1m (3.3 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>QSFP30-01.5</td>
<td>1.5m (4.9 ft.)</td>
<td>30</td>
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<tr>
<td>QSFP30-02</td>
<td>2m (6.6 ft.)</td>
<td>30</td>
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<tr>
<td>QSFP30-02.5</td>
<td>2.5m (8.2 ft.)</td>
<td>30</td>
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<tr>
<td>QSFP30-03</td>
<td>3m (9.8 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>QSFP26-05</td>
<td>5m (16.4 ft.)</td>
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### Maximum Lengths

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<thead>
<tr>
<th>Gauge</th>
<th>IBTA DDR</th>
<th>IBTA QDR</th>
<th>IEEE 802.3ba</th>
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<tr>
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<td>5m (16.4 ft.)</td>
<td>3m (9.8 ft.)</td>
<td>3m (9.8 ft.)</td>
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<td>28</td>
<td>7m (23.0 ft.)</td>
<td>4m (13.1 ft.)</td>
<td>4m (13.1 ft.)</td>
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<tr>
<td>26</td>
<td>8m (26.2 ft.)</td>
<td>5m (16.4 ft.)</td>
<td>5m (16.4 ft.)</td>
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<tr>
<td>24</td>
<td>10m (32.8 ft.)</td>
<td>6m (19.7 ft.)</td>
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</table>

1 Per IBTA cable MOI VO.69: -13dB @5GHz
2 May not meet IBTA QDR insertion loss limits but is acceptable for most InfiniBand and all Ethernet applications.

Note: Contact Customer Service for additional lengths.
QSFP+ FDR Passive Copper Assemblies

Siemon QSFP+ FDR Copper Cable assemblies provide 56Gb/s of bandwidth (4 X 14Gb/s). These QSFP+ (SFF-8436) cables exceed industry standards to support DDR, QDR, FDR and emerging 4x16Gb/s applications. Siemon’s QSFP+ Fourteen Data Rate assemblies are a high-density, cost-effective, low-power option for leading edge 56Gbs high-speed data centers, available in standard lengths up to 3 meters (9.8 ft) with longer custom lengths available upon request.

STANDARDS COMPLIANCE
- Electrical: IBTA V2 Revision 1.3, IEEE 802.3ba
- SFF-8436, SFF-8636
- RoHS

APPLICATIONS
- InfiniBand 4X SDR, DDR, QDR
- Ethernet 10G, 40G
- Fibre Channel 10G, 40G, SAN, 4x16G
- RapidIO
- Myrinet 40G
- Rack-to-Rack, Shelf-to-Shelf Interconnect
- Networking
- Storage
- Hub, switches, routers, servers

PCB Termination
- Laser stripped conductors
- Automated welding for unmatched consistency
- Overmold provides additional strain relief to minimize pistoning
- Welding results in less dielectric shrink-back than soldering
# Product Information

## Performance Specifications

<table>
<thead>
<tr>
<th>Electrical</th>
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<tr>
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<tr>
<td>Insulation Resistance</td>
<td>1000 Mohms</td>
</tr>
<tr>
<td>Current Rating</td>
<td>0.5 Amp Min/Signal Contact</td>
</tr>
</tbody>
</table>

## General

| Operating Temperature               | 0 to 70° C (32 to 158° F) |
| Flammability Rating (Plastics)      | UL 94               |
| Green Features                      | RoHS, Lead-Free     |
| Shield                              | Braid/Foil          |
| Marking                             | Mfg Name, Part#, Date Code |

## Ordering Information:

**QSFP+ to QSFP+ FDR Passive Copper Cable Assemblies**

<table>
<thead>
<tr>
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<th>Gauge</th>
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<tr>
<td>QSFPFDR30-01</td>
<td>1m (3.3 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>QSFPFDR30-02</td>
<td>2m (6.6 ft.)</td>
<td>30</td>
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<tr>
<td>QSFPFDR28-03</td>
<td>3m (9.8 ft.)</td>
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## Maximum Lengths

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<th>Gauge</th>
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<th>IBTA GDR</th>
<th>IEEE 802.3ba</th>
<th>IBTA FDR</th>
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<tbody>
<tr>
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<td>5m (16.4 ft.)</td>
<td>3m (9.8 ft.)</td>
<td>3m (9.8 ft.)</td>
<td>2m (6.6 ft.)</td>
</tr>
<tr>
<td>28</td>
<td>7m (23.0 ft.)</td>
<td>4m (13.1 ft.)</td>
<td>4m (13.1 ft.)</td>
<td>3m (9.8 ft.)</td>
</tr>
</tbody>
</table>

Note: Contact Customer Service for additional lengths.
QSFP+ to 4 SFP+ Passive Copper Assemblies

Siemon hybrid cables allow users to connect SFP+ and QSFP+ equipment. They offer a cost-effective, low-power option for high-speed data center interconnects. The direct-attach assemblies support 4 lanes of 10Gb/s (40Gb/s composite) and are available in standard lengths up to 5 meters (16.4 ft.) with longer custom lengths available.

QUICK FACTS
- Positive retention pull-release latch system
- Multiple conductor sizes available
- High-density QSFP+ connector
- Ultra low crosstalk for enhanced performance

STANDARDS COMPLIANCE
- QSFP+ End
  - Electrical: IBTA V2 Revision 1.3, IEEE 802.3ba
  - SFF-8436, SFF-8636
  - RoHS
- SFP+ End
  - SFF-8431
  - SFF-8432
  - SFF-8472
  - RoHS

APPLICATIONS
- InfiniBand SDR, DDR
- Ethernet 1G, 10G
- Fibre Channel
- Rack-to-Rack, Shelf-to-Shelf Interconnect
- Networking
- Storage
- Hubs, switches, routers, servers

PCB Termination
- Laser stripped conductors
- Overmold provides additional strain relief to minimize pistoning
- Automated welding for unmatched consistency
- Welding results in less dielectric shrink-back than soldering

* Proposed IBTA return loss limit
Product Information

PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Electrical</th>
<th>Plug</th>
</tr>
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<tbody>
<tr>
<td>Min. Dielectric Withstand Voltage</td>
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</tr>
<tr>
<td>Insulation Resistance</td>
<td>Backshell Material</td>
</tr>
<tr>
<td></td>
<td>Nickel Plated Zinc Diecast</td>
</tr>
<tr>
<td>Current Rating</td>
<td>Contact Material</td>
</tr>
<tr>
<td></td>
<td>PCB with Gold-Plated Pads</td>
</tr>
<tr>
<td>General</td>
<td>Latch</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>Positive Latching w/Pull Tab</td>
</tr>
<tr>
<td>Flammability Rating (Plastics)</td>
<td>Insertion Force</td>
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<tr>
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<td>SFP+: 30N (6.7 lbf.) Max</td>
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<tr>
<td>Shield</td>
<td>Withdrawal Force</td>
</tr>
<tr>
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<td>QSFP+: 30N (6.7 lbf.) Max</td>
</tr>
<tr>
<td>Marking</td>
<td>Retention Force</td>
</tr>
<tr>
<td></td>
<td>90N (20.2 lbf.) Min</td>
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<tr>
<td><strong>Cable</strong></td>
<td>Durability</td>
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<tr>
<td>Conductor</td>
<td>QSFP+: 250 Cycles Min</td>
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<tr>
<td>Wire Gauge</td>
<td>SFP+: 50 cycles Min</td>
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<tr>
<td>Impedence</td>
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</tr>
<tr>
<td>Construction</td>
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</tr>
<tr>
<td>Jacket Type</td>
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</tr>
<tr>
<td>Bend Radius</td>
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</tr>
<tr>
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<td>Part Number</td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td></td>
</tr>
<tr>
<td>Gauge</td>
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Ordering Information:

QSFP+ to SFP+ Passive Copper Cable Assemblies

<table>
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<th>Length</th>
<th>Gauge</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.5m (1.6 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>SFPPQSFP30-01</td>
<td>1m (3.3 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>SFPPQSFP30-02</td>
<td>2m (6.6 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>SFPPQSFP28-03</td>
<td>3m (9.8 ft.)</td>
<td>28</td>
</tr>
<tr>
<td>SFPPQSFP28-05</td>
<td>5m (16.4 ft.)</td>
<td>28</td>
</tr>
</tbody>
</table>
CXP Passive Copper Assemblies

Siemon CXP Copper Cable assemblies were developed for high-density applications, offering a cost-effective, low-power option for high-speed data center interconnects. The CXP form factor can replace up to three standard QSFP+ connections, providing greater density and reduced system cost. These direct attached assemblies support 12 channels of 10Gb/s (QDR) for 120Gb/s InfiniBand, or 10 channels of 10Gb/s for 100Gb/s (IEEE 802.3ba) and are available in standard lengths up to 4 meters (13.12 ft) with longer custom lengths available.

- Positive retention pull-release latch system
- Multiple conductor sizes available
- Ultra low crosstalk for enhanced performance
- High-density CXP connector

**STANDARDS COMPLIANCE**
- SFF-8642
- IBTA V2 Revision 1.3
- IEEE 802.3ba
- RoHS

**APPLICATIONS**
- InfiniBand 12xSDR, 12xDDR, 12xQDR
- Ethernet 10G, 40G, 100G
- Rack-to-Rack, Shelf-to-Shelf Interconnect
- Networking, NIC
- Storage: DAS, SAN, NAS
- Hubs, switches, routers, servers
Product Information

PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Electrical</th>
<th>Plug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. Dielectric Withstand Voltage</td>
<td>Backshell Material</td>
</tr>
<tr>
<td>300 VDC</td>
<td>Nickel Plated Zinc Diecast</td>
</tr>
<tr>
<td>Insulation Resistance</td>
<td>Contact Material</td>
</tr>
<tr>
<td>1000 Mohms</td>
<td>PCB with Gold-Plated Pads</td>
</tr>
<tr>
<td>Current Rating</td>
<td>Plastic Material</td>
</tr>
<tr>
<td>0.5 Amp Min/Signal Contact</td>
<td>Nylon</td>
</tr>
<tr>
<td>General</td>
<td>Latch</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>Positive Latching w/Pull Tab</td>
</tr>
<tr>
<td>0 to 70° C (32 to 158° F)</td>
<td>Insertion Force</td>
</tr>
<tr>
<td>Flammability Rating (Plastics)</td>
<td>150N (33.7 lbf.) Max</td>
</tr>
<tr>
<td>UL 94</td>
<td>Withdrawal Force</td>
</tr>
<tr>
<td>Rexin Features</td>
<td>30N (6.7 lbf.) Max</td>
</tr>
<tr>
<td>Shield</td>
<td>Durability</td>
</tr>
<tr>
<td>Braid/Foil</td>
<td>250 Cycles</td>
</tr>
<tr>
<td>Marking</td>
<td>Tightest Recommended Vertical Spacing</td>
</tr>
<tr>
<td>Mfg Name, Part#, Date Code</td>
<td>(Belly to Belly)</td>
</tr>
<tr>
<td></td>
<td>27mm (1.1 in.) Center to Center</td>
</tr>
<tr>
<td></td>
<td>Tightest Recommended Vertical Spacing</td>
</tr>
<tr>
<td></td>
<td>(Stacked)</td>
</tr>
<tr>
<td></td>
<td>16.5mm (0.65 in.) Center to Center</td>
</tr>
</tbody>
</table>

Ordering Information:

CXP to CXP Passive Copper Cable Assemblies

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Length</th>
<th>Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXP30-01</td>
<td>1m</td>
<td>30</td>
</tr>
<tr>
<td>CXP30-02</td>
<td>2m</td>
<td>30</td>
</tr>
<tr>
<td>CXP38-03</td>
<td>3m</td>
<td>28</td>
</tr>
<tr>
<td>CXP27-04</td>
<td>4m</td>
<td>27</td>
</tr>
</tbody>
</table>

Cable

<table>
<thead>
<tr>
<th>Conductor</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wire Gauge</td>
<td>30 AWG, 28 AWG and 27 AWG</td>
</tr>
<tr>
<td>Impedence</td>
<td>100 +/- 5 ohms</td>
</tr>
<tr>
<td>Construction</td>
<td>Twinaxial</td>
</tr>
<tr>
<td>Cable OD</td>
<td>30 AWG = 9.5mm (0.37 in.)</td>
</tr>
<tr>
<td></td>
<td>28 AWG = 11mm (0.43 in.)</td>
</tr>
<tr>
<td></td>
<td>27 AWG = 13.8mm (0.54 in.)</td>
</tr>
<tr>
<td>Jacket Type</td>
<td>PVC</td>
</tr>
<tr>
<td>Bend Radius</td>
<td>5X Cable OD - Single</td>
</tr>
<tr>
<td></td>
<td>10X Cable OD - Repeated</td>
</tr>
</tbody>
</table>

Maximum Lengths

<table>
<thead>
<tr>
<th>Gauge</th>
<th>IBTA DDR</th>
<th>IBTA QDR</th>
<th>IEEE 802.3ba</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>4m</td>
<td>2m</td>
<td>2m (6.6 ft.)</td>
</tr>
<tr>
<td>28</td>
<td>7m</td>
<td>3m</td>
<td>3m (9.8 ft.)</td>
</tr>
<tr>
<td>27</td>
<td>7m</td>
<td>3m</td>
<td>3m (9.8 ft.)</td>
</tr>
</tbody>
</table>

CXP27-04 is not guaranteed to meet IBTA QDR or IEEE 802.3ba insertion loss requirements.

Note: Contact Customer Service for additional lengths.
CXP to 3 QSFP+ Breakout Passive Copper Assemblies

Siemon CXP to 3 QSFP+ Copper Cable assemblies allow users to connect CXP and QSFP+ equipment together. Compliant with both CXP and QSFP+ specifications, this breakout cable provides a cost effective, low-power option for high density, high-speed data center interconnects. The CXP form factor can replace up to three standard QSFP+ connections, providing greater density and reduced system cost. These direct-attach assemblies support emerging 100Gb/s applications and are available in standard lengths up to 3 meters (9.8 ft.) with longer custom lengths available.
Product Information

PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>Electrical</th>
<th>Plug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. Dielectric Withstand Voltage</td>
<td>300 VDC</td>
<td>Backshell Material</td>
</tr>
<tr>
<td>Insulation Resistance</td>
<td>1000 Mohms</td>
<td>Nickel Plated Zinc Diecast</td>
</tr>
<tr>
<td>Current Rating</td>
<td>0.5 Amp Min/Signal Contact</td>
<td>Contact Material</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCB with Gold-Plated Pads</td>
</tr>
<tr>
<td>General</td>
<td></td>
<td>Plastic Material</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0 to 70° C (32 to 158° F)</td>
<td>Latch</td>
</tr>
<tr>
<td>Flammability Rating (Plastics)</td>
<td>UL 94</td>
<td>Positive Latching w/Pull Tab</td>
</tr>
<tr>
<td>Green Features</td>
<td>RoHS, Lead-Free</td>
<td>Insertion Force</td>
</tr>
<tr>
<td>Shield</td>
<td>Braid/Foil</td>
<td>CXP: 150N (33.7 lbf.) Max: QSFP+: 40 N (9.0 lbf.) Max.</td>
</tr>
<tr>
<td>Marking</td>
<td>Mfg Name, Part#, Date Code</td>
<td>Withdrawal Force</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CXP: 50N (11.2 lbf.) Max: QSFP+: 30 N (6.7 lbf.) Max.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Durability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>250 Cycles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>General</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXP Tightest Recommended Horizontal Spacing</td>
<td>27mm (1.1 in.) Center to Center</td>
</tr>
<tr>
<td>CXP Tightest Recommended Vertical Spacing (Stacked)</td>
<td>16.5mm (0.65 in.) Center to Center</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Cable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conductor</td>
<td>Solid</td>
</tr>
<tr>
<td>Wire Gauge</td>
<td>30 AWG to 26 AWG</td>
</tr>
<tr>
<td>Impedence</td>
<td>100 +/- 5 ohms</td>
</tr>
<tr>
<td>Construction</td>
<td>Twinaxial</td>
</tr>
<tr>
<td>Cable OD</td>
<td>30AWG = 9.5mm (0.37 in.)</td>
</tr>
<tr>
<td></td>
<td>28AWG = 11mm (0.43 in.)</td>
</tr>
<tr>
<td>Jacket Type</td>
<td>PVC</td>
</tr>
<tr>
<td>Bend Radius</td>
<td>5X Cable OD - Single</td>
</tr>
<tr>
<td></td>
<td>10X Cable OD - Repeated</td>
</tr>
</tbody>
</table>

Ordering Information:

CXP to QSFP+ Passive Copper Cable Assemblies

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Length</th>
<th>Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXPQSFP30-01</td>
<td>1m (3.3 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>CXPQSFP30-02</td>
<td>2m (6.6 ft.)</td>
<td>30</td>
</tr>
<tr>
<td>CXPQSFP28-03</td>
<td>3m (9.8 ft.)</td>
<td>28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Length</th>
<th>Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBTA DDR</td>
<td>IBTA QDR</td>
<td>IEEE 802.3ba</td>
</tr>
<tr>
<td>30</td>
<td>4m (13.1 ft.)</td>
<td>2m (6.6 ft.)</td>
</tr>
<tr>
<td>28</td>
<td>6m (19.7 ft.)</td>
<td>3m (9.8 ft.)</td>
</tr>
</tbody>
</table>

Maximum Lengths

CXP27-04 is not guaranteed to meet IBTA QDR or IEEE 802.3ba insertion loss requirements.
40Gb/s QSFP+ Active Optical Cable Assemblies

Siemon 40Gb/s Low Power Active Optical Cable assemblies offer a cost-effective, extended reach option for high-speed data center interconnects. These AOC assemblies incorporate integrated opto-electronics with four fiber optic transceivers per end, each operating at data rates from 1 to 10.5 Gb/s and supporting a reach up to 100 meters (328 ft.).

AOC’s offer customers the flexibility of traditional optical modules by interfacing to systems via a standard QSFP+ MSA, SFF-8436 connector. The cable is electrically compliant with the SFP+ interface supporting InfiniBand, Ethernet, Fibre Channel and other applications. The QSFP+ connector includes the Digital Diagnostic Monitoring Interface (DDMI).

STANDARDS COMPLIANCE
- Electrical: IBTA V2 Revision 1.3, IEEE 802.3ba
- SFF-8436, SFF-8636
- RoHS-6 (lead free)
- Class 1 laser product per IEC 60825-1
- IEEE 802.3ba

APPLICATIONS
- InfiniBand SDR, DDR, QDR
- Ethernet 40G BASE-SR4
- Fibre Channel 4G, 8G, 10G
- Rack-to-Rack, Shelf-to-Shelf Interconnect
- Proprietary Cluster Interconnect
- Networking
- Storage
- Hubs, switches, routers, servers
Product Information

PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Electrical</th>
<th>Cable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Voltage</td>
<td>OFNP (PVC)</td>
</tr>
<tr>
<td>Power Consumption Per End</td>
<td>Minimum Bend Radius</td>
</tr>
<tr>
<td>3.1 to 3.6V</td>
<td>15xDIA - Dynamic</td>
</tr>
<tr>
<td></td>
<td>10xDIA - Static</td>
</tr>
<tr>
<td>0.8W typical, 1.2W Max</td>
<td>Minimum Cable Assembly Bend Radius</td>
</tr>
<tr>
<td></td>
<td>Cable and Connector: 56mm (2.2 in.)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>Cross Section (without connector)</td>
</tr>
<tr>
<td>0 to 70°C (32 to 158°F)</td>
<td>3mm (.12 in.) OD</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>Channel Parameters</td>
</tr>
<tr>
<td>-25 to 75°C (-13 to 167°F)</td>
<td>Channels</td>
</tr>
<tr>
<td>Channels</td>
<td>4 Lanes, bi-directional</td>
</tr>
<tr>
<td>4 channels, bi-directional</td>
<td>Date Rate</td>
</tr>
<tr>
<td>Connector (each end)</td>
<td>10.5 Gbps/ channel Max.</td>
</tr>
<tr>
<td>QSFP+</td>
<td>Operating Optical Wavelength</td>
</tr>
<tr>
<td></td>
<td>850nm</td>
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</table>

Ordering Information:

QSFP+ to QSFP+ Active Optical Cable Assemblies

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>QSFP-FB-005</td>
<td>5m (16.4 ft.)</td>
</tr>
<tr>
<td>QSFP-FB-010</td>
<td>10m (32.8 ft.)</td>
</tr>
<tr>
<td>QSFP-FB-015</td>
<td>15m (49.2 ft.)</td>
</tr>
<tr>
<td>QSFP-FB-020</td>
<td>20m (65.6 ft.)</td>
</tr>
<tr>
<td>QSFP-FB-030</td>
<td>30m (98.4 ft.)</td>
</tr>
<tr>
<td>QSFP-FB-050</td>
<td>50m (164 ft)</td>
</tr>
<tr>
<td>QSFP-FB-100</td>
<td>100m (328 ft)</td>
</tr>
</tbody>
</table>

Note: Contact Customer Service for additional lengths.
56Gb/s QSFP+ Active Optical Cable Assemblies

Siemon 56Gb/s Low Power Active Optical Cable assemblies offer a cost-effective, extended reach option for high-speed data center interconnects. These AOC assemblies incorporate integrated opto-electronics with four fiber optic transceivers per end, each operating at data rates from 1 to 14 Gb/s and supporting a reach up to 100 meters. The cable is available in a number of standard lengths up to 100 meters.

AOC’s offer customers the flexibility of traditional optical modules by interfacing to systems via a standard QSFP+ MSA, SFF-8436 connector. The cable is electrically compliant with the SFP+ interface supporting InfiniBand, Ethernet, Fiber Channel and other applications. The QSFP+ connector includes the Digital Diagnostic Monitoring Interface (DDMI).

STANDARDS COMPLIANCE
- Electrical: IBTA V2 Revision 1.3, IEEE 802.3ba
- SFF-8436, SFF-8636
- RoHS-6 (lead free)
- Class 1 laser product per IEC 60825-1
- IEEE 802.3ba

APPLICATIONS
- InfiniBand SDR, DDR, QDR
- Ethernet 40G BASE-SR4
- Fiber Channel 16 GFC
- Rack-to-Rack, Shelf-to-Shelf Interconnect
- Proprietary Cluster Interconnect
- Networking
- Storage
- Hubs, switches, routers, servers

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Product Information

PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Electrical</th>
<th>Cable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Voltage</td>
<td>Type</td>
</tr>
<tr>
<td>3.1 to 3.6V</td>
<td>GFNP (PVC)</td>
</tr>
<tr>
<td>Power Consumption Per End</td>
<td>Minimum Bend Radius</td>
</tr>
<tr>
<td>0.8W typical, 1.2W max</td>
<td>15xDIA - Dynamic</td>
</tr>
<tr>
<td></td>
<td>10xDIA - Static</td>
</tr>
<tr>
<td></td>
<td>Minimum Cable Assembly Bend Radius</td>
</tr>
<tr>
<td></td>
<td>Cable and Connector: 56mm (2 in.)</td>
</tr>
<tr>
<td></td>
<td>Cross Section (without connector)</td>
</tr>
<tr>
<td></td>
<td>3mm [0.11 in.] OD</td>
</tr>
<tr>
<td></td>
<td>Channels</td>
</tr>
<tr>
<td></td>
<td>4 Lanes, bi-directional</td>
</tr>
<tr>
<td></td>
<td>Date Rate</td>
</tr>
<tr>
<td></td>
<td>14.025 Gbps/ channel Max.</td>
</tr>
<tr>
<td></td>
<td>Operating Optical Wavelength</td>
</tr>
<tr>
<td></td>
<td>850nm</td>
</tr>
</tbody>
</table>

General

| Operating Temperature | 0 to 70° C (+32 to 158°F) |
| Storage Temperature   | -25 to 75° C (-13 to 167°F) |
| Channels              | 4 channels, bi-directional    |
| Connector (each end)  | QSFP+                       |

Cable

<table>
<thead>
<tr>
<th>Cross Section (without connector)</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>3mm [0.11 in.] OD</td>
<td>GFNP (PVC)</td>
</tr>
</tbody>
</table>

Ordering Information:

QSFP+ to QSFP+ Active Optical Cable Assemblies

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>QSFPFDR-F-005</td>
<td>5m (16.4 ft.)</td>
</tr>
<tr>
<td>QSFPFDR-F-010</td>
<td>10m (32.8 ft.)</td>
</tr>
<tr>
<td>QSFPFDR-F-015</td>
<td>15m (49.2 ft.)</td>
</tr>
<tr>
<td>QSFPFDR-F-020</td>
<td>20m (65.6 ft.)</td>
</tr>
<tr>
<td>QSFPFDR-F-030</td>
<td>30m (98.4 ft.)</td>
</tr>
<tr>
<td>QSFPFDR-F-050</td>
<td>50m (164 ft.)</td>
</tr>
<tr>
<td>QSFPFDR-F-100</td>
<td>100m (328 ft.)</td>
</tr>
</tbody>
</table>

Note: Contact Customer Service for additional lengths.
Ruggedized/Industrial Connectivity

Siemon’s line of ruggedized/industrial connectivity allows cabling professionals to deliver high-performance copper and fiber cabling in harsh environments that would damage standard connectivity. Including sealed and vibration-resistant outlets, couplers, cords and mounting accessories for twisted-pair copper and fiber systems, Siemon’s ruggedized connectivity is ideal for industrial, outdoor and other harsh environments.

Section Contents

- Ruggedized Z-MAX® and MAX® Copper Connectivity ........ 13.1
- Ruggedized Category 6/6A Outlets ............................. 13.2
- Ruggedized Category 5e Outlets ............................... 13.2
- Ruggedized Category 5e Plugs ................................. 13.2
- Ruggedized Category 6/6A Modular Patch Cords .......... 13.2
- Ruggedized Category 5e Modular Patch Cords ............... 13.3
- Ruggedized Dust Caps ........................................... 13.4
- Ruggedized Surface Mount Boxes ............................. 13.4
- Ruggedized Stainless Steel Faceplates ....................... 13.4
- Ruggedized LC Fiber Connectivity ............................ 13.5
- Ruggedized LC Fiber Plug and Outlet ....................... 13.6
- Ruggedized LC Fiber Upgrade Kit ............................. 13.6
Ruggedized Copper Connectivity

Siemon is well-known for its industry leading high performance connectivity. The same high performance copper and fiber products are available with our patented Ruggedized MAX® & Z-MAX® housings. Ruggedized outlets and modular patch cords provide an IP66/IP67-rated seal, protecting plug and outlet contacts from dust, moisture, vibration, and common cleaning chemicals. These solutions are ideal for protecting valuable connections in laboratory environments, hospitals, food processing plants and other harsh environments.

Easy Termination — The Ruggedized MAX outlets utilize a standard 110 tool for quick and easy punch-down termination while Z-MAX outlets feature an innovative record-setting termination method.

Gripping Ribs — Plug housing and dust caps feature ribs to provide additional gripping for mating and unmating.

Standardized Interface — Ruggedized connector has been recognized by the Open DeviceNet Vendor Association (ODVA), TIA-1005-2009 and IEC 61076-3-106.

Ensures Proper Seal — Quarter-turn bayonet-style mating ensures proper plug depth into the outlet and an IP66/IP67 rated seal.

Compared to all other RJ-45 products on the market today the Z-MAX termination process embraces the principle that simpler is better. By establishing straightforward steps that eliminate potential errors, Siemon has been able to set a new benchmark for the fastest UTP and shielded category 6A outlet termination speed.

Meets Harsh Demands of the Environment
Specially designed Ruggedized connectors can withstand humidity, dust and vibration.

Vibration Causes Contact Damage In Typical Outlets
Seen under a microscope after exposure to extreme vibration, contact between a typical modular plug and outlet can pit the contact pins, causing intermittent transmission problems.

Humidity Affects Typical Outlets
Humidity corrodes contact pins inside typical outlets. Repeated exposure can eventually destroy the contact pins, rendering the outlet unusable. The Ruggedized outlet’s special housing prevents this corrosion.
Ruggedized Z-MAX® Outlets

The Ruggedized Z-MAX Outlets feature Siemon’s high performance Z-MAX Outlets with innovative and fastest termination method in the industry. The combination of premium connectivity and Ruggedized housing with quarter-turn bayonet-style mating design provides a high performance solution for harsh environments.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XG2-Z5S</td>
<td>Category 5e Shielded Z-MAX Ruggedized outlet, T568A/B</td>
</tr>
<tr>
<td>XG2-Z6</td>
<td>Category 6 UTP Z-MAX Ruggedized outlet, T568A/B</td>
</tr>
<tr>
<td>XG2-Z6A</td>
<td>Category 6A UTP Z-MAX Ruggedized outlet, T568A/B</td>
</tr>
<tr>
<td>XG2-Z6AS</td>
<td>Category 6A Shielded Z-MAX Ruggedized outlet, T568A/B</td>
</tr>
</tbody>
</table>

Ruggedized MAX® Outlets

The Ruggedized MAX outlet features a MAX module housed in a protective shell. The outlet’s outer housing is made of durable, chemical-resistant, Ruggedized-grade thermoplastic and features Siemon’s patented quarter-turn bayonet-style mating design. Guaranteed category 5e and 6 performance to 160 MHz even in the most punishing environments.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X5</td>
<td>Category 5e UTP MAX Ruggedized outlet, T568A/B</td>
</tr>
<tr>
<td>X5-X5S</td>
<td>Category 5e Shielded, MAX Ruggedized bulkhead coupler (outlet to outlet)</td>
</tr>
<tr>
<td>X6</td>
<td>Category 6 UTP, MAX Ruggedized outlet, T568A/B</td>
</tr>
</tbody>
</table>

Ruggedized MAX Plugs

The Ruggedized MAX Plug features a category 5e modular plug contained in Siemon’s Ruggedized-grade housing with patented quarter-turn bayonet-style mating design. The plug can be terminated in the field, allowing custom lengths to be assembled quickly on site in the event a cable is cut or damaged. It terminates to twisted-pair cable with 22 – 26 AWG (0.64 – 0.40mm) solid or 7-strand conductors with an insulated conductor diameter of 0.86 – 0.99mm.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XP85</td>
<td>Category 5e UTP, MAX Ruggedized plug, 8-position, 8-contacts</td>
</tr>
<tr>
<td>XP85S</td>
<td>Category 5e Shielded, MAX Ruggedized plug, 8-position, 8-contacts</td>
</tr>
</tbody>
</table>

Ruggedized Category 6 UTP Patch cords

Ruggedized patch cords combine the high performance and quality that Siemon cords are known for with a protective Ruggedized-grade plug housing. These assemblies feature standard black MC® 6 cordage.

Ruggedized to Ruggedized

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XC6-(XX)</td>
<td>Category 6 UTP, Ruggedized plug-to-Ruggedized plug, CMX</td>
</tr>
</tbody>
</table>

Ruggedized to Modular

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XC6-(XX)-B05</td>
<td>Category 6 UTP, Ruggedized plug-to-modular RJ-45 plug, yellow boot, CMX</td>
</tr>
</tbody>
</table>

Use (XX) to specify length: 03 = 0.9m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.1m (7 ft.), 10 = 3.1m (10 ft.), 15 = 4.6m (15 ft.)

Ruggedized Category 6A Shielded Patch cords

These cable assemblies provide the final component necessary to construct a category 6A shielded channel solution for harsh environments when used in conjunction with Siemon’s category 6A shielded cable and category 6A compatible shielded Ruggedized outlets.

Ruggedized to Modular

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XC6A-S(XX)-B05</td>
<td>Category 6A Patch Cord, Shielded (S/FTP), Ruggedized-to-Modular, Ivory w/ yellow boot, CMLSOH</td>
</tr>
</tbody>
</table>

Use (XX) to specify length: 03 = 0.9m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.1m (7 ft.), 10 = 3.1m (10 ft.), 15 = 4.6m (15 ft.), 20 = 6.1m (20 ft.)
**Ruggedized Category 5E UTP Patch Cords**

Designed to withstand the rigors of harsh environments, Siemon’s Ruggedized category 5e stranded cordage is petroleum and UV resistant, is not affected by common chemicals and water, operates in a wider temperature range and provides a longer flex life. Available in two jacket types to meet various environmental requirements (see table on last page for jacket comparison).

**Ruggedized to Ruggedized**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XC5-(XX)</td>
<td>Category 5e UTP, Ruggedized plug-to-Ruggedized plug, PVC jacket</td>
</tr>
<tr>
<td>XC5-(XX)T</td>
<td>Category 5e UTP, Ruggedized plug-to-Ruggedized plug, TPE jacket</td>
</tr>
</tbody>
</table>

**Ruggedized to Modular**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XC5-(XX)-B05</td>
<td>Category 5e UTP, Ruggedized plug-to-modular RJ-45 plug, yellow boot, PVC jacket</td>
</tr>
<tr>
<td>XC5-(XX)-B05T</td>
<td>Category 5e UTP, Ruggedized plug-to-modular RJ-45 plug, yellow boot, TPE jacket</td>
</tr>
<tr>
<td>XC5-(XX)-B05U</td>
<td>Category 5e UTP, Ruggedized plug-to-modular RJ-45 plug, yellow boot, PUR jacket</td>
</tr>
</tbody>
</table>

**Modular to Modular**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XC5NS-(XX)-B05T</td>
<td>Category 5e UTP, modular RJ-45 plug-to-modular RJ-45 plug, yellow boot, TPE jacket</td>
</tr>
<tr>
<td>XC5NS-(XX)-B05U</td>
<td>Category 5e UTP, modular RJ-45 plug-to-modular RJ-45 plug, yellow boot, PUR jacket</td>
</tr>
</tbody>
</table>

PVC = Polyvinyl Chloride, TPE = Thermoplastic Elastomer

Use (XX) to specify length: 03 = 0.9m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.1m (7 ft.), 10 = 3.1m (10 ft.), 15 = 4.6m (15 ft.), 20 = 6.1m (20 ft.)

PVC jacket color is teal. TPE jacket color is black.

---

**Ruggedized Category 5E Shielded**

Designed to withstand the rigors of harsh environments, Siemon’s Ruggedized category 5e stranded cordage is petroleum and UV resistant, is not affected by common chemicals and water, operates in a wider temperature range and provides a longer flex life. Available in three Ruggedized jacket types to meet various environmental requirements (see table on last page for jacket comparison).

**Ruggedized to Ruggedized**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XC5S-(XX)</td>
<td>Category 5e Shielded (SF/UTP) Ruggedized plug-to-Ruggedized plug, PVC jacket</td>
</tr>
<tr>
<td>XC5S-(XX)T</td>
<td>Category 5e Shielded (SF/UTP) Ruggedized plug-to-Ruggedized plug, TPE jacket</td>
</tr>
</tbody>
</table>

**Ruggedized to Modular**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XC5S-(XX)-B05</td>
<td>Category 5e Shielded (SF/UTP) Ruggedized plug-to-modular RJ-45 plug, yellow boot, PVC jacket</td>
</tr>
<tr>
<td>XC5S-(XX)-B05T</td>
<td>Category 5e Shielded (SF/UTP) Ruggedized plug-to-modular RJ-45 plug, yellow boot, TPE jacket</td>
</tr>
<tr>
<td>XC5S-(XX)-B05U</td>
<td>Category 5e Shielded (SF/UTP) Ruggedized plug-to-modular RJ-45 plug, yellow boot, PUR jacket</td>
</tr>
</tbody>
</table>

**Modular to Modular**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XC5SNS-(XX)-B05T</td>
<td>Category 5e Shielded (SF/UTP) modular RJ-45 plug-to-modular RJ-45 plug, yellow boot, TPE jacket</td>
</tr>
<tr>
<td>XC5SNS-(XX)-B05U</td>
<td>Category 5e Shielded (SF/UTP) modular RJ-45 plug-to-modular RJ-45 plug, yellow boot, PUR jacket</td>
</tr>
</tbody>
</table>

PVC = Polyvinyl Chloride, PUR = Polyurethane, TPE = Thermoplastic Elastomer

Use (XX) to specify length: 03 = 0.9m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.1m (7 ft.), 10 = 3.1m (10 ft.), 15 = 4.6m (15 ft.), 20 = 6.1m (20 ft.)

PVC and PUR jacket color is teal. TPE jacket color is black.
Ruggedized Dust Caps

The Ruggedized dust caps are the ideal way to protect your investment in your Ruggedized cabling system. Outlet dust caps can be used to protect unused outlets or to seal an outlet during wash down periods when the outlet and plug may be disconnected. Plug dust caps protect Ruggedized patch cords from exposure to elements or accidental damage when not mated to an outlet.

Dust caps are constructed of industrial-grade thermoplastic for superior protection and durability. Additionally, outlet and plug dust caps feature a retention tether, which prevents them from being misplaced when not in use.

XP-CAP2
Ruggedized plug dust cap with metal retention tether

XG2-CAP
Ruggedized plug dust cap with nylon retention tether

X-CAP
Ruggedized MAX outlet dust cap with metal retention tether

XG2-CAP
Ruggedized Z-MAX outlet dust cap with nylon retention tether

Ruggedized Surface Mount Boxes

The Siemon Ruggedized MAX Surface Mount Box (IBOX) mounts either Siemon copper or fiber Ruggedized outlets. Boxes provide an IP66/IP67 (NEMA 4X) seal and can be mounted on virtually any flat surface. Available in 1, 2, 3, and 4-port versions. Compression fittings provided for cable entry.

X-IBOX-01
Ruggedized surface mount box, 1-port, supplied with 1 cable entry compression fitting

X-IBOX-02
Ruggedized surface mount box, 2-port, supplied with 2 cable entry compression fittings

X-IBOX-03
Ruggedized surface mount box, 3-port, supplied with 3 cable entry compression fittings

X-IBOX-04
Ruggedized surface mount box, 4-port, supplied with 4 cable entry compression fittings

Note: Compression fittings accommodate cable diameters from 4.1–7.9mm (0.16 - 0.31 in.)

Technical Tip!
Contact Technical Support for punch tool to create Ruggedized knockouts for custom mounting.

Ruggedized Stainless Steel Faceplates

Mount Siemon’s Ruggedized outlets and adapters into these stainless steel faceplates for a protective seal from moisture and debris. The faceplates are available in 1-, 2-, 3- and 4-port options with a rear sealing gasket and carry an IP44 rating.

XFP-S-01-SS
Single gang faceplate, 1-port, stainless steel

XFP-S-02-SS
Single gang faceplate, 2-port, stainless steel

XFP-D-03-SS
Double gang faceplate, 3-port, stainless steel

XFP-D-04-SS
Double gang faceplate, 4-port, stainless steel

Faceplates include mounting screws with sealed screw head.
Ruggedized LC Fiber Connectivity

The Siemon Ruggedized LC Fiber solution provides a robust fiber connection with an IP66/IP67-rated seal and is ideal for protecting fiber connections in laboratory environments, hospitals, food processing plants and other harsh environments.

The Siemon Ruggedized Fiber solution is ideal for installations requiring extended distances, in close proximity to heavy sources of EMI, or where fiber active equipment is used.

Precision Performance
R&D labs develop, design and implement rigorous testing programs using sophisticated instrumentation. The Ruggedized LC provides reliability with leading edge technology for applications where highly accurate performance is critical.

Robust and Reliable
Ruggedized Fiber connections help to streamline operations and reduce costs in manufacturing environments by avoiding regular replacement of standard connectors that cannot withstand these environments.

Meets Harsh Demands of the Environment
The Ruggedized LC connector is ideal in areas where chemicals, corrosive gases and liquids are commonplace.
Ruggedized LC Fiber Plug and Outlet

### Ruggedized Multimode

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XPLC2-MM</td>
<td>Ruggedized LC fiber plug, Multimode, duplex.</td>
</tr>
<tr>
<td></td>
<td>Includes two Multimode LC connectors</td>
</tr>
<tr>
<td>XLC-MM</td>
<td>Ruggedized LC fiber adapter, Multimode, duplex</td>
</tr>
</tbody>
</table>

### Ruggedized Singlemode

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XPLC2-SM</td>
<td>Ruggedized LC fiber plug, Singlemode, duplex.</td>
</tr>
<tr>
<td></td>
<td>Includes two Singlemode LC connectors</td>
</tr>
<tr>
<td>XLC-SM</td>
<td>Ruggedized LC fiber adapter, Singlemode, duplex</td>
</tr>
</tbody>
</table>

Note: Ruggedized LC fiber plug accepts 2 strand, round, breakout style fiber optic cable with O.D. ranges from 5 – 8mm (0.19 - 0.31 in.) with two 2.4 – 3.0mm (0.09 - 0.11 in.) jacketed sub-units.

### Field-Installable LC Fibre Connector

Siemon LC buffered connectors have been qualified for use in Siemon’s Ruggedized fiber system. Use these connectors to terminate 62.5/125 or 50/125 micron Multimode or Singlemode fiber and plug into the rear of the Ruggedized LC outlet.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC1-LC-MM-B80</td>
<td>LC simplex connector, Multimode, buffered fiber, beige boot</td>
</tr>
<tr>
<td>FC2-LC-MM-J80</td>
<td>LC duplex connector, Multimode, jacketed fiber, beige boot</td>
</tr>
<tr>
<td>FC1-LC-SM-B02</td>
<td>LC simplex connector, Singlemode, buffered fiber, white boot</td>
</tr>
<tr>
<td>FC2-LC-SM-J02</td>
<td>LC duplex connector, Singlemode, jacketed fiber, white boot</td>
</tr>
</tbody>
</table>

### Ruggedized LC Fiber Kit

Use the Ruggedized LC Kit with Siemon’s LightSpeed® Termination Kit for Ruggedized LC connector terminations. The kit contains a dual LC polishing puck, which decreases polish time by 50%.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTERM-XLC</td>
<td>Ruggedized LC fiber termination kit used in conjunction with FTERM-L2 includes dual polishing puck</td>
</tr>
<tr>
<td>FT-2PUCK</td>
<td>Dual LC polishing puck</td>
</tr>
<tr>
<td>FTMSL2HEAD</td>
<td>Dual LC microscope adapter</td>
</tr>
</tbody>
</table>
### Technical Information

<table>
<thead>
<tr>
<th>Enclosure Protection</th>
<th>IP66/IP67</th>
<th><strong>Temperature:</strong> -40°C (-40°F) to 85°C (185°F) Service Environment Testing: IEC 61753-1 Ed. 1.0</th>
<th>Plug/Outlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell Material</td>
<td>PBT - Polybutylene Terephthalate (Valox®), UL94V-0</td>
<td>Plug/Outlet</td>
<td></td>
</tr>
<tr>
<td>Collar Nut Material</td>
<td>Acetal, Acetal/Elastomer alloy (Delrin®)</td>
<td>Plug/Outlet</td>
<td></td>
</tr>
<tr>
<td>Gasket Material</td>
<td>Silicone</td>
<td>Plug/Outlet</td>
<td></td>
</tr>
<tr>
<td>Ferrule Material</td>
<td>Silicone</td>
<td>Plug</td>
<td></td>
</tr>
<tr>
<td>Adapter Sleeve Material</td>
<td>Ceramic</td>
<td>Outlet</td>
<td></td>
</tr>
<tr>
<td>Mechanical Durability</td>
<td>500 mating cycles minimum</td>
<td>Plug/Outlet</td>
<td></td>
</tr>
<tr>
<td>Chemical Resistance</td>
<td>Materials selected to provide the widest range of protection from most solvents and common industrial chemicals. (Details available upon request)</td>
<td>Plug/Outlet</td>
<td></td>
</tr>
<tr>
<td>Bulkhead Thickness</td>
<td>0.762mm to 3.175mm (0.030 in. to 0.125 in.)</td>
<td>Outlet</td>
<td></td>
</tr>
<tr>
<td>Strain Relief</td>
<td>250 Newtons (56 lbs) typical</td>
<td>Plug</td>
<td></td>
</tr>
<tr>
<td>Optical Performance</td>
<td>TIA-986-C.3, ISO/IEC 11801 ED 2.2, Telcordia GR-326-CORE</td>
<td>Plug/Outlet</td>
<td></td>
</tr>
</tbody>
</table>
Tools and Testers

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MT-5000 ................................................... 14.3
25-Pair Test Adapters ............................. 14.3
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TERA® Cable Preparation Tool ................. 14.8
CPT / CPT-WEB ..................................... 14.8
PT-908 Crimp Tool ................................ 14.9
STM-8

The STM-8 is an economical and versatile hand-held tester designed to test UTP and shielded cabling for opens, shorts, reversals, miswires, split pairs and cable length. Its rugged, state-of-the-art construction, easy-to-read LCD display and multiple remotes allow one person to quickly test and identify up to four different cable runs from one location.

Tests All Wiring Configurations
Tests T568A, T568B, USOC, 10BASE-T, Token Ring, and TP-PMD wiring configurations.

Determines Unknown Wiring
In FIND mode, the STM-8 will detect and identify which wiring scheme is present in the cabling being tested.

Determines Cable Length
In the LENGTH mode, the STM-8 will determine the distance measurements on any given cable link up to 900m (2952 ft.). This feature may be used with all four identifiable remotes.

Extended Battery Life — A low battery status indication is provided, as well as automatic shut-off

Long Length Testing — Test cable runs up to 900m (2952 ft.)

Easy Reference — Indications for 6- and 8-position jacks

Line Voltage Indicator — The presence of line voltage is indicated on the display to help prevent accidental damage to the unit

Universal Compatibility — The UTP modular cords are equipped with patented “universal” plugs, that fit into any standard 6- or 8-position modular jack

Multi-Location Testing — Additional remotes can be purchased separately
STM-8 and STM-8-S

Part # | Description
--- | ---
STM-8 | UTP tester. Includes carrying case, remote “A”, two universal plug-ended modular cords, wiring guide, 9V alkaline battery, instructions, and warranty card
MC-8-005 | Universal plug-ended modular replacement cord
STM-8-S | Shielded twisted-pair tester. Includes carrying case, active remote, two screened modular cords, wiring guide, 9V alkaline battery, instructions, and warranty card
MCS-S-8-005 | Shielded modular replacement cord

Horizontal Cross-Connect

The S110® Test Adapter can be used to test horizontal cabling that is terminated on 110-type connecting blocks.

STM-8

TAP-110

STM-8-R(X)

STM8-R(X).

Active remote for UTP or F/UTP with two shielded modular cords, instructions, 3V lithium battery, and warranty card

STM8-RA-S

STM-8-S

STM-8-S

Shielded Modular patch cord wired straight through

4-pair F/UTP cable

STM-8-RA-S

Active remote

STM8-R(X),

Additional identifiable UTP passive remotes

Use (X) to specify remote identity:

A = remote A,

3 = kit of remotes B, C, and D

Accessories

Siemon’s active remote utilizes a shielded jack for testing both UTP and shield continuity of F/UTP cabling. LEDs on remote indicate test results after each test cycle; solid green LED flash for pass and solid red LED flash for fail. Identifiable passive remotes are also available for testing multiple locations.
**MT-5000**

The MT-5000 is a versatile, hand-held tester — it is fast, reliable, and durable. It tests opens, shorts, and miswires from 1- to 25-pairs and can accommodate a combination of 25-pair and modular jack terminations. For instance, using the 25-pair test adapter, the remote unit can be attached to a 66 block that is connected to multiple horizontal cable runs in the equipment closet. Then, using the modular jack in the master unit, one person can test up to six 4-pair station cables in the work area. Cable runs of up to 762m (2500 ft.) can be tested with accuracy.

The MT-5000 tests individual conductors, not pairs. This allows testing of all wiring configurations including USOC, T568A, and T568B.

The MT-5000 consists of a master and a remote unit. The master controls all of the test functions, so one person can perform testing. Test results are reported on a large, easy-to-read LCD display. Each unit has both male and female 25-pair connectors, one 6-position (1-, 2- or 3-pair) modular jack, and one 8-position (4-pair) keyed modular jack. The unit also features a low-battery status indicator, a power input jack, and a power saving auto-off switch. It comes in a padded, nylon carrying case with batteries included.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT-5000</td>
<td>Cable tester (master and remote) with case and two universal plug-ended modular cords</td>
</tr>
<tr>
<td>MC-8-005</td>
<td>Universal plug-ended modular replacement cord, 152 mm (6 in.)</td>
</tr>
</tbody>
</table>

**25-Pair Test Adapters**

Siemon 25-pair test adapters are designed for accessing all 25 pairs on a 66M connecting block. A positive connection ensures accurate testing with easy installation and removal. They can also be used to field-connectorise 66M blocks. Available with either male or female 25-pair connectors.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAP-50F</td>
<td>25-pair S66™ test adapter with female connector</td>
</tr>
<tr>
<td>TAP-50M</td>
<td>25-pair S66 test adapter with male connector</td>
</tr>
</tbody>
</table>

See page 9.22 for 25-pair cable assemblies.

**MODAPT®**

This modular adapter allows in-line testing for any plug/jack combination. It includes two 4-pair jacks plus a 152mm modular cord terminated with our patented 4-pair “universal” plug for accessing any standard 6 or 8-position jack. Individual conductors are broken out by pin number and correspond to eight separate test pads. Test equipment can be securely attached to the test pads using alligator clips. For quick reference in the field, USOC, T568A, and T568B wiring charts are printed right onto the MODAPT body. When used with Siemon’s TESTAR® adapter and S110® test adapter, the MODAPT can be used to test connections on S66M and S110 blocks.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODAPT</td>
<td>Test adapter with one 152mm (6 in.) 4-pair universal plug-ended modular cord</td>
</tr>
<tr>
<td>MC-8-005</td>
<td>Universal plug-ended modular replacement cord, 152 mm (6 in.)</td>
</tr>
</tbody>
</table>
TOOLS AND TESTERS

TESTAR®

The TESTAR creates easy test access to 66 quick clips. It plugs directly onto S66M blocks, establishing a positive connection and providing a 4-pair modular jack for plugging in test equipment. The body is molded in blue plastic and has molded-in finger grips for easy handling.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TESTAR-8T-A</td>
<td>Category 5e compatible, 4-pair, 8-position, TESTAR, T568A</td>
</tr>
<tr>
<td>TESTAR-8A-A</td>
<td>Category 5e compatible, 4-pair, 8-position, TESTAR, T568B</td>
</tr>
</tbody>
</table>

Other TESTARs

The positive connection made by the TESTAR eliminates possible problems associated with handling alligator clips or test probes such as accidental shorting across terminals or intermittent test connections. Test equipment is inserted into the TESTAR through a 1-, 2-, 3-, or 4-pair modular jack. To utilize equipment requiring alligator clips, our MODAPT® adapter can be plugged into the TESTAR.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TESTAR-2</td>
<td>1-pair, 6-position, TESTAR, USOC</td>
</tr>
<tr>
<td>TESTAR-4</td>
<td>2-pair, 6-position, TESTAR, USOC</td>
</tr>
<tr>
<td>TESTAR-6</td>
<td>3-pair, 6-position, TESTAR, USOC</td>
</tr>
<tr>
<td>TESTAR-8R1</td>
<td>4-pair, 8-position, TESTAR, USOC</td>
</tr>
<tr>
<td>TESTAR-8</td>
<td>4-pair, 8-position, TESTAR, T568B</td>
</tr>
<tr>
<td>TESTAR-8T</td>
<td>4-pair, 8-position, TESTAR, T568A</td>
</tr>
</tbody>
</table>

S110® Test Adapters

Siemon’s 4-pair S110 test adapters provide a convenient way to test 110-type connecting blocks. These adapters plug directly onto any 110-type connecting block and provide a modular jack for connection to test equipment or patch cords. It is the only 110 style test adapter that can be attached to both terminated and unterminated 110 connecting blocks. The adapters are end-stackable, and are polarised to prevent incorrect insertion.

The adapters have an area for a colored icon (a blue and red icon are included) for additional identification. They are available in T568A and T568B wiring configurations and are category 5e compatible.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAP-110-T4</td>
<td>Category 5e compatible, 4-pair, 8-position, S110 test adapter, T568A</td>
</tr>
<tr>
<td>TAP-110-A4</td>
<td>Category 5e compatible, 4-pair, 8-position, S110 test adapter, T568B</td>
</tr>
</tbody>
</table>

Technical Tip!

The adapters utilize a unique, spring-loaded contact design to ensure a reliable connection without disturbing existing cross-connect terminations. This also extends the life-cycle of the test adapter.
Termination Tools

Z-TOOL™

The Z-TOOL is an integral part of the exclusive Z-MAX® termination process and is used with both UTP and shielded Z-MAX modules. This easy-to-use and ergonomic designed tool is used both to secure the cable retention/grounding clip and to fully engage the termination module into the back of the outlet.

- Alignment Aids — Keyed guide ensures correct outlet insertion during termination
- Ergonomic — Minimal hand strain, limited pressure and zero-impact for comfortable repeatability
- Attachment Point — For key ring or lanyard and rack-mount capability
- One-Handed Activation — Allows final Z-MAX termination step to be accomplished with one hand for operation space-restricted areas
- Retention Clip Locking — Additional function closes and locks hinged cable retention/grounding clip
- Slim Profile — To fit in a pocket or toolbox

Ordering Information:

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z-TOOL</td>
<td>Z-MAX Termination Tool</td>
</tr>
</tbody>
</table>

S110®/S210® Multi-Pair Termination Tools

The Siemon S110/S210 multi-pair termination tool is a versatile impact tool designed to terminate and cut UTP cable, and seat connecting blocks. The impact mechanism and termination blades have been designed to reliably terminate and cut UTP cable the first time, every time. The tool features an easy to hold, ergonomically designed handle that helps reduce fatigue when trimming wire or seating connecting blocks to the wiring base.

- S788J4-210 — 4-pair S210 termination tool
- S788J4B-210 — 4-pair S210 replacement cutting blade and insertion assembly
- S788J4H-210 — 4-pair S210 replacement head for impact tool, including housing, cutting blade and insertion assembly
- S788J4 — 4-pair S110 termination tool
- S788J4B — 4-pair S110 replacement cutting blade and insertion assembly
- S788J4H — 4-pair S110 replacement head for impact tool, including housing, cutting blade and insertion assembly
- S788J5 — 5-pair S110 termination tool
- S788J5B — 5-pair S110 replacement cutting blade and insertion assembly
- S788J5H — 5-pair S110 replacement head for impact tool, including housing, cutting blade and insertion assembly

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MAX® TurboTool™

Siemon’s MAX TurboTool significantly reduces the time associated with the termination of category 5e and 6 UTP MAX outlets. In contrast to single conductor punchdown tools which require eight individual termination cycles for each outlet, the MAX TurboTool seats and cuts all 8 conductors with a single action.

- **Durable Construction** — 13 gauge CRS ensures reliable operation through daily handling.
- **Definitive Ratcheting Action** — Provides positive audible and tactile feedback indicating that the termination process is complete.
- **Established Platform** — The tool shares the same proven core ratcheting platform as Siemon’s PT-908 crimp tool which has been in the market for nearly 20 years.
- **High Contrast Colors** — Provide optimal visibility to prevent tool from inadvertently being left behind in low light areas.
- **Retention Clip** — Ensures outlets are fully seating prior to termination.
- **Replaceable Termination Cartridges** — Allows the wearable part of the tool to be readily replaced.

The tool supports termination of all category 5e and 6 MAX outlets – flat, angled and keystone.

The rear cable channel provides cable access for the full range of category 5e and 6 UTP cable sizes while the side slots provide clearance for laced twisted-pair conductors.

**Ordering Information:**

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>MAX-TT</td>
<td>MAX TurboTool</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAX-TTREP</td>
<td>Replacement MAX TurboTool Cartridge Kit</td>
</tr>
</tbody>
</table>

- Includes outlet nesting die, termination die, attachment hardware and Allen wrench.
**S814 Impact Tool**

The S814 impact tool terminates wires on 66 and 110 clips. The tool is spring-loaded and fully adjustable, a helpful feature when working with wires of varying thicknesses. The bayonet-style mount allows the blades to be changed quickly and easily, and a compartment in the handle stores an extra blade.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>S814</td>
<td>Tool body only</td>
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<tr>
<td>S814-66</td>
<td>Tool body with 66 termination blade</td>
</tr>
<tr>
<td>S814-110</td>
<td>Tool body with 110 termination blade</td>
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<tr>
<td>S81401-66</td>
<td>66 termination blade</td>
</tr>
<tr>
<td>S81401-110-88</td>
<td>110 termination blade</td>
</tr>
</tbody>
</table>

Technical Tip!
Termination blades for Siemon punch down tools are reversible — one end terminates and cuts off the excess wire, the other end terminates without cutting.

**Palm Guard**

The Siemon palm guard has been ergonomically designed to provide a safe and convenient means of terminating our flat or angled CT® couplers and MAX® modules. The palm guard absorbs the impact of termination while securing the connector to prevent movement. Includes an adjustable elastic strap and a removable insert, which can be used to hold MAX modules while terminating on flat surfaces.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>PG</td>
<td>Palm guard with MAX insert</td>
</tr>
<tr>
<td>PG-MX6</td>
<td>MAX Insert</td>
</tr>
</tbody>
</table>

**CI-KIT**

The CI-KIT provides all the tools that a telecommunications technician needs for day-to-day activities. Included in the kit is an S814 impact tool with 66 and 110 termination blades, a probe pic, electrician's scissors, mini flathead screwdriver, and a CPT-WEB cable preparation tool. These tools are stored in a handy, lightweight clip-on pouch which allows the installer to cut, strip, and terminate cabling without having to carry separate tools or larger tool kits.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>CI-KIT</td>
<td>Clip-on tool kit with S814 impact tool (with 66 and 110 termination blades), probe pic, electrician's scissors, mini flathead screwdriver, and CPT-WEB tool</td>
</tr>
<tr>
<td>CI-POUCH</td>
<td>Clip-on CI-KIT tool pouch only</td>
</tr>
</tbody>
</table>

**CI-KIT2**

Siemon's CI-KIT2 includes all the components of the standard CI-KIT, with the addition of our popular AllPrep™ cable preparation tool in place of the CPT-WEB tool. Also, a “D-Ring” has been added to carry additional tools. These tools are stored in a handy, lightweight, clip-on pouch which allows the installer to cut, strip and terminate cabling without having to carry separate tools or larger tool kits.

<table>
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<th>Part #</th>
<th>Description</th>
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<tr>
<td>CI-KIT2</td>
<td>Clip-on tool kit with S814 impact tool (with 66 and 110 termination blades), probe pic, electrician's scissors, mini flathead screwdriver, and AllPrep cable preparation tool</td>
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<tr>
<td>CI-POUCH2</td>
<td>Clip-on CI-KIT2 tool pouch only</td>
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</table>
AllPrep™ Cable Preparation Tool

The AllPrep cable preparation tool provides a robust and reliable method of preparing both coaxial and twisted-pair cable for termination. The tool features two color-coded dies that are interchangeable for each media type. The coaxial die strips RG59 and RG6 coaxial cable and the twisted-pair die strips a wide variety of UTP, shielded and fiber cables.

<table>
<thead>
<tr>
<th>Part #</th>
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<tr>
<td>CPT-RGTP</td>
<td>AllPrep cable preparation tool</td>
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<td></td>
<td>for coax/twisted pair cables</td>
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<tr>
<td>CPT-DIE-RG</td>
<td>Replacement coax die (black)</td>
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<tr>
<td>CPT-DIE-TP</td>
<td>Replacement twisted-pair die (yellow)</td>
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<tr>
<td>CPT-DIE-6A</td>
<td>Green die</td>
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<tr>
<td>CPT-DIE-XX</td>
<td>White die</td>
</tr>
<tr>
<td>CPT-DIE-EZ</td>
<td>Blue die</td>
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</table>

TERA® Cable Preparation Tool

The TERA cable preparation tool significantly reduces the time required to prepare fully shielded (S/FTP) cable. The tool includes an insert die with a blade, which is specifically designed to accurately strip the jacket and foil from 4-pair fully shielded cable without damaging the conductors. A template is also included to pre-align cable pairs and ensure proper pair positioning during termination.

<table>
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<tr>
<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>CPT-T</td>
<td>TERA preparation tool. Includes CPT-DIE-T4 and TERA cable preparation template</td>
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<tr>
<td>CPT-DIE-T4</td>
<td>Replacement TERA cable die (red)</td>
</tr>
<tr>
<td>CPT-DIE-TMPL</td>
<td>Replacement TERA wiring guide (red)</td>
</tr>
</tbody>
</table>

CPT

The CPT provides a simple and effective method to remove the outer cable jacket from 2-, 3-, or 4-pair cables without damaging the inner conductor insulation. The CPT is recommended for use with any round cable with an exterior diameter from 2.54 – 6.35mm (0.1 - 0.25 in.) and an outer jacket thickness from 0.380 – 0.635mm (0.015 - 0.25 in.)

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<tr>
<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>CPT</td>
<td>Cable preparation tool</td>
</tr>
</tbody>
</table>

CPT-WEB

The CPT-WEB is designed to easily strip the outer cable jacket, flatten and separate the webbed conductors of Siemon’s category 5e cross-connect jumper wire and other UTP cable with webbed conductor pairs.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>CPT-WEB</td>
<td>Webbed cable preparation tool</td>
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</tbody>
</table>
PT-908 Crimp Tool

This 3-in-1 ratchet-style crimp tool cuts, strips, and crimps modular plugs on either round or flat cables. The parallel action design maintains accurate alignment of the die with the plug for a precision crimp every time. The PT-908 comes with a padded carrying case which includes a storage compartment for carrying spare dies, replacement stripper blades, and modular plugs, and will attach to a technician’s belt.

PT-908 . . . . . . . . . . . . . . . . . .
Crimp tool with built-in round cable cutter/stripper, 8-position die set and padded nylon carrying case

PT-908-D . . . . . . . . . . . . . . . . . .
Crimp tool with built-in round cable cutter/stripper, 8-position die set packaged in a clear plastic display case

PT-DIE-8 . . . . . . . . . . . . . . . . . .
Replacement 8-position die set

PT-DIE-6 . . . . . . . . . . . . . . . . . .
6-position die set

Technical Tip!
Siemon does not recommend field termination of modular cords. We recommend the use of factory-terminated and tested modular cords for any category 5e or higher application.
Glossary

Allen Crosstalk: Noise or interference caused by electromagnetic coupling from one cable to another cable, expressed in decibels.

Attenuation: See Insertion Loss.

Attenuation to Crosstalk Ratio (ACR): The difference between insertion loss and crosstalk measured in decibels.

Attenuation to Crosstalk Ratio, Far-end (ACR-F): Crosstalk measured at the opposite end from which the disturbing signal is transmitted, normalized by the insertion loss of the cable or cabling.

Backbone Cabling: Alternate name for Cabling Subsystem 2 or Cabling Subsystem 3 in a typical commercial building environment.

Balance: An indication of signal voltage equality and phase polarity on a conductor pair. Perfect balance occurs when the signals across a twisted-pair are equal in magnitude and opposite in phase with respect to ground.

Balanced Signal Transmission: Two voltages, equal and opposite in phase with respect to each other, across the conductors of a twisted-pair (commonly referred to as tip and ring).

Balun: An impedance matching transformer used to convert unbalanced signals to balanced signals and vice versa.

Bandwidth: A range of frequencies, usually the difference between the upper and lower limits of the range, typically expressed in megahertz (MHz). Bandwidth may also be used to describe the information-carrying capacity of a medium, for example optical fiber bandwidth is specified in megahertz kilometers (MHz.km).

Bonding: The permanent joining of metallic parts to form an electrically conductive path that will assure electrical continuity and the capacity to conduct safely any current likely to be imposed on it.

Bridged Tap: The multiple appearances of the same cable pair or optical fiber at several distribution points. Also known as parallel connections.

Bridging: A means of providing through connections between conductors or pairs that are terminated on connecting blocks. These through connections are commonly provided by means of individual metallic “bridging” clips or multiple “bridging” clips that are housed in a plastic insulator.

Building Distributor (BD): The international term for intermediate cross-connect; the location where the building backbone cable(s) terminates and at which connections to the campus backbone cable(s) may be made.

Bundled Cable: An assembly of two or more cables continuously bound together to form a single unit prior to installation (sometimes referred to as loomed, speed-wrap or whip cable constructions).

Cabling: A combination of cables, wire, cords and connecting hardware used in the telecommunications infrastructure.

Cabling Subsystem 1: Cabling from the equipment outlet to Distributor A, Distributor B, or Distributor C.

Cabling Subsystem 2: Cabling between Distributor A and either Distributor B or Distributor C (if Distributor B is not implemented).

Cabling Subsystem 3: Cabling between Distributor B and Distributor C.

Campus Backbone: Cabling between buildings that share telecommunications facilities.

Campus Distributor (CD): The international term for main cross-connect; the location where the campus backbone cabling begins.

Category: For the ANSI/TIA/EIA 568 Broadband Cabling Systems standard, a series of numbers and letters that indicate the performance characteristics of a cabling system. Category 5e or higher is required for 1000Base-T. Category 6A is required for 10GBase-T.

Category: 1. ANSI/TIA-568-C family of Standards: These North American standards define mechanical and electrical performance of balanced twisted-pair cabling and components by a category of performance (i.e. category 3, category 5e, category 6, category 6A, and category 8).

2. ISO/IEC 11801 2nd edition and addenda: These international standards define mechanical and electrical performance of telecommunications cabling by a class of performance (class C, class D, class E, class EA, class F, and class FA) and components by a category of performance (i.e. category 3, category 5, category 6, category 6A, category 7, and category 7A).

Channel: The end-to-end transmission path connecting any two points between application specific equipment. Equipment and work area cords, with the exception of the modular interface connecting to equipment, are included in the channel.

Class: See category.

Common Mode Transmission: A transmission scheme where voltages appear equal in magnitude and phase across a conductor pair with respect to ground; may also be referred to as longitudinal mode.

Consolidation Point (CP): A connection facility within Cabling Subsystem 1 for interconnection of cables extending from building pathways to the equipment outlet.

Cord: An assembly of cord cable with a plug on one or both ends used to connect telecommunications equipment to horizontal or backbone cabling.

Cross-connect: A facility enabling the termination of cables as well as their interconnection or cross-connection with other cabling or equipment; also known as a distributor.

Cross-connection: A connection scheme between cabling runs, subsystems and equipment using patch cords or jumpers that attach to connecting hardware on each end.

Crosstalk: Noise or interference caused by electromagnetic coupling from one signal path to another. Crosstalk performance is generally expressed in decibels.

Data Center: A building or portion of a building whose primary function is to house a computer room and its support areas.

Decibel (dB): A standard unit for expressing transmission gain or loss as derived from a ratio of signal voltages or power.

Delay Skew: The difference in propagation delay between the fastest and slowest pair in a cable or cabling system.

Demarcation Point (DP): A point where operational control or ownership changes.

Differential Mode Transmission: A transmission scheme where voltages appear equal in magnitude and opposite in phase across a twisted-pair with respect to ground; may also be referred to as balanced mode.

Distributor A: Optional connection facility that is cabled between the equipment outlet and Distributor B or Distributor C in a hierarchical star topology; representing the horizontal cross-connect (HC) in a typical commercial building environment.

Distributor B: Optional intermediate connection facility that is cabled to Distributor C in a hierarchical star topology; representing the intermediate cross-connect (IC) in a typical commercial building environment.

Distributor C: Central connection facility in a hierarchical star topology; representing the main cross-connect (MC) in a typical commercial building environment.

Electromagnetic Compatibility (EMC): The ability of a system to minimize radiated emissions and maximize immunity from external noise sources.

Electromagnetic Interference (EMI): The interference in signal transmission or reception caused by the radiation of electrical and magnetic fields.

Entrance Facility (EF): The location where both public and private network telecommunications services (e.g. cables, antennae, etc.) enters into a building and/or where backbone pathways linking to other buildings in a campus environment are located. The entrance facility may contain public network interface devices as well as telecommunications equipment. Entrance facilities are often used to house electrical protection equipment and connecting hardware for the transition between outdoor and indoor cable.

Entrance Point, Telecommunications: The point of emergence of telecommunications conductors through an exterior wall, a concrete floor slab, or from a rigid metal conduit or intermediate metal conduit.

Equipment Outlet (EO): Outermost connection facility in a hierarchical star topology; representing the telecommunications outlet/connector (TO) in a typical commercial building environment.

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Equipment Room (ER): A centralized space for telecommunications equipment that serves the occupants of the building or multiple buildings in a campus environment. An equipment room is considered distinct from a telecommunications room because it is considered to be a building or campus serving (as opposed to floor serving) facility and because of the nature or complexity of the equipment it contains.

Equipment Room, Telecommunications: A centralized space for telecommunications equipment that serves the occupants of the building. An equipment room is considered distinct from the telecommunications room because of the nature and complexity of the equipment it houses.

Ethernet: A family of copper and optical fiber communications technologies for local area networks (LANs).

Far-end Crosstalk (FEXT): Crosstalk measured at the opposite end from which the disturbing signal is transmitted.

Fiber Optic Transmission: See Optical Fiber Transmission.

Fibre Channel: A switched network communications technology featuring point-to-point bidirectional serial links connecting I/O networks such as storage area networks (SAN) or processors with high-speed peripheral devices such as disks.

Floor Distributor (FD): The international term for horizontal cross-connect; the distributor used to connect between the horizontal cable and other cabling subsystems or equipment.

Fully Shielded twisted-pair (STP): A balanced twisted-pair cable containing balanced twisted-pair conductors that are individually foil shielded, surrounded by an overall metallic braid, and bound in a single cable sheath.

Ground: A conducting connection, whether intentional or accidental, between an electrical circuit (telecommunications) or equipment and earth, or to some conducting body that serves in place of the earth.

Hertz (Hz): A measure of frequency as defined in units of cycles per second.

Horizontal Cabling: Alternate name for Cabling Subsystem 1 in a typical commercial building environment.

Horizontal Cross-connect (HC): A cross-connect of horizontal cabling to other cabling, e.g., horizontal, backbone, or equipment.

Hybrid Cable: An assembly of two or more cables, of the same or different types or categories, covered by one overall sheath.

InfiniBand: A switched network communications technology featuring point-to-point bidirectional serial links connecting I/O networks such as storage area networks (SAN) or processors with high-speed peripheral devices such as disks.

Insertion loss:
1. In a copper twisted-pair system, the voltage loss resulting from the insertion of a connector into a transmission line.
2. In an optical fiber system, the loss of optical power caused by inserting a component, such as a connector, coupler or splice, into a previously continuous optical path.

Insulation Displacement Connection (IDC): A wire connection device that penetrates the insulation of a copper wire when it is being inserted (punched-down) into a metal contact, allowing an electrical connection to be made.

Interbuilding Backbone: Telecommunications cable(s) that is part of the campus subsystem that connects one building to another.

Interconnection: A connection scheme that provides direct access to the cabling infrastructure and the ability to make cabling system changes using equipment cords.

Intermediate Cross-Connect (ICC): The connection point between a backbone cable that extends from the main cross-connect (first-level backbone) and the backbone cable from the horizontal cross-connect (second-level backbone).

Intrabuilding Backbone: Telecommunications cable(s) that are part of the building /subsystem that connect one equipment room to another.

Jumper: An assembly of twisted-pairs without connectors on either end used to join telecommunications links at a cross-connect.

Laser Optimized: A multimode optical fiber with a refractive index profile optimized for use with laser light sources such as a vertical-cavity surface-emitting laser, or VCSEL.

Link: An end-to-end transmission path provided by the cabling infrastructure. Cabling links include all cables and connecting hardware that comprise the horizontal or backbone subsystems. Equipment and work area cables are not included as part of a link.

Local Area Network (LAN): A geographically limited data communications system for a specific user group consisting of a group of interconnected computers, sharing applications, data, and peripheral devices such as printers and CD-ROM drives intended for the local transport of data, BAS services, video, and voice.

Longitudinal Conversion Loss (LCL): A measure (in dB) of the differential voltage induced on a conductor pair as a result of subjecting that pair to longitudinal voltage. LCL is a measure of circuit balance.

Main Cross-connect (MC): A cross-connect for first level backbone cables, entrance cables, and equipment cables.

Modular Jack: A telecommunications outlet/connector for wire or cables as defined in the FCC Part 68 Subpart F. Modular jacks can have 4, 6 or 8 contact positions, but not all the positions need be equipped with contacts.

Modular Plug: A telecommunications connector for wire or cables as defined in the FCC Part 68 Subpart F. Modular plugs can have 4, 6 or 8 contact positions, but not all the positions need be equipped with contacts.

Multimode Optical Fiber: An optical fiber that will allow multiple modes of light to propagate. The fiber may be either a graded-index or step-index fiber. Multimode optical fibers have a much larger core than singlemode fibers.

Multi-user Telecommunications Outlet Assembly (MuTOA): A grouping in one location of several telecommunications/outlet connectors.

Nanosecond (ns): One billionth of a second (10^-9 seconds).

Near-end Crosstalk (NEXT Loss): The undesired coupling of a signal from one pair of wires to another. Signal distortion as a result of signal coupling from one pair to another at various frequencies.

Network Demarcation Point: The point of interconnection between the local exchange carrier’s telecommunications facilities and the telecommunications systems wiring and equipment the end user’s facility. This point shall be located on the subscriber side of the telephone company’s protector or the equivalent thereof in cases where a protector is not required.

Open Office Cabling: The cabling that distributes from the telecommunications closet to the open office area utilizing a consolidation point or multi-user telecommunications outlet assembly.

Optical Fiber Transmission: A communications scheme whereby electrical data is converted to light energy and transmitted through optical fibers.

Outlet/Connector, Telecommunications: A connecting device in the work area on which horizontal cable terminates.

Patch Cord: A length of cable with connectors on one or both ends used to join telecommunications links at a cross-connect.

Patch Panel: Connecting hardware that typically provides means to connect horizontal or backbone cables to an arrangement of fixed connectors that may be accessed using patch cords or equipment cords to form cross-connections or interconnections.

Plenum: A compartment or chamber to which one or more air ducts are connected and that forms part of the air distribution system.

Private Branch Exchange (PBX): A private switching system usually serving an organization, such as a business, located on the customer’s premises. It switches calls both inside a building or premises and outside to the telephone network, and can sometimes provide access to a computer from a data terminal.

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Glossary

**Work Area Cord:** See Cord.

**Punch Down:** A method for securing wire to a quick clip in which the insulated wire is placed in the terminal groove and pushed down with a special tool. As the wire is seated, the terminal displaces the wire insulation to make an electrical connection. The punch down operation may also trim the wire as it terminates.

**Return Loss:** Noise or interference caused by impedance discontinuities along the transmission line at various frequencies; may be called echo. Return loss is expressed in decibels.

**Shielded twisted-pair (F/UTP):** A balanced twisted-pair cable surrounded by foil (screen) and bound in a single cable sheath.

**Shielded twisted-pair (F/FTP):** A balanced twisted-pair cable where each twisted pair is surrounded by an individual foil, and all four pairs are surrounded by an overall foil (screen), bound in a single cable sheath.

**Small Form Factor:** An optical fiber connector and adapter that provide for two strands of fiber in a footprint similar to an unshielded twisted-pair (RJ-style) plug and socket.

**Star Topology:**
1. A method of cabling each telecommunications outlet/connector directly to a cross-connect in a horizontal cabling subsystem.
2. A method of cabling each cross-connect (HC and IC) to the main cross-connect (MC) in a backbone cabling subsystem.

**Surge:** A rapid rise in current or voltage, usually followed by a fall back to a normal level; also referred to as a transient.

**Telecommunications:** Any transmission, emission or reception of signs, signals, writings, images, sounds or information of any nature by cable, radio, visual, optical or other electromagnetic systems.

**Telecommunications Room (TR):** An enclosed space for housing telecommunications equipment, cable terminations, and cross-connect cabling used to serve work areas located on the same floor. The telecommunications room is the typical location of the horizontal cross-connect and is considered distinct from an equipment room because it is considered to be a floor serving (as opposed to building or campus serving) facility.

**Topology:** The physical or logical layout of links and nodes in a network. These include star, ring, and bus configurations.

**Transfer Impedance:** A measure (in milliohms/meter) of shield effectiveness.

**Trunk:** A communication line between two switching systems. The term “switching systems” typically includes equipment in a central office (the telephone company) and PBX. A tie trunk connects PBXes. Central office trunks connect a PBX to the switching system at the central office.

**Unshielded Twisted-Pair (UTP):** A balanced twisted-pair cable bound in a single cable sheath.

**Work Area:** A space, typically in a commercial building, where the occupants interact with telecommunications equipment.

**Work Area Cord:** See Cord.
Warranty

Siemon delivers a range of product and system warranties:

- A one (1) year repair or replace warranty on Tools and Testers and active electronics (ie MapIT G2)

- A five (5) year repair or replace warranty for all Siemon Products (cabling system connecting hardware) when not installed in a certified Siemon Cabling System®

- An extended Siemon Cabling System Warranty covering application assurance, product, quality and performance margins when designed and installed by a Siemon Certified InstallerSM and registered with Siemon.

*Please contact your local Siemon Company sales office or visit Siemon’s website for more information.

Limited Five (5) Year Product Warranty

Siemon warrants its products to be free from defects in material and workmanship. Should any product fail to conform, Siemon will, upon written notice from Distributor of such non-conforming product, within five (5) years after date of purchase, either replace it F.O.B. original point-of-delivery, or refund the purchase price, at Siemon’s option, and shall have the right to require Distributor to return the defective product to Siemon’s plant unless such return is impracticable. The remedies provided herein shall be Buyer’s sole and exclusive remedies, and no statement or recommendation not contained herein shall have any force or effect unless in writing and signed by an authorized officer of Siemon. Siemon makes no warranty, expressed or implied, as to merchantability or fitness for a particular purpose of any product sold. In no event will Siemon be liable for any special incidental, or consequential damages, where asserted in contract, tort, or otherwise. This warranty applies only to those cabling products that are used to terminate or cross-connect telecommunications cabling. Warranty terms for other categories of cabling products (e.g., tools, test equipment, protection apparatus, etc.) may vary.
<table>
<thead>
<tr>
<th>Index</th>
<th>Description</th>
<th>Code</th>
<th>Category</th>
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<tbody>
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**Note:** The table above is a partial extract of the document and may not include all the entries listed.
Contractor Resource Center

Online resource dedicated to the needs of cabling contractors, focused on the products, tools and news you can use every day to be more efficient and successful.

Link: http://www.siemon.com/us/contractors/

Standards Informant

Your guide to the latest activities and advancements in critical network cabling and data center standards. Created and maintained by the experts that lead the standards-setting bodies.

Link: http://blog.siemon.com/standards/

Network Infrastructure Blog

Data center and enterprise cabling experts from across the global IT market deliver educational resources, industry intelligence and actionable advice on a wide range of network infrastructure issues.

Link: http://blog.siemon.com/infrastructure/

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