

MapIT[®] G2

NEXT GENERATION AUTOMATED INFRASTRUCTURE MANAGEMENT



Powered By:



EagleEye™ Connect

WWW.SIEMON.COM



MapIT® G2

Next-Generation Intelligent Infrastructure Solution for Physical Layer Network Management

MapIT G2 integrates a powerful combination of innovative Smart Patch Panels, user-friendly Master Control Panels and EagleEye™ software to provide real-time tracking and reporting of network-wide physical layer activity.

This benchmark Automated Infrastructure Management (AIM) system offers truly unparalleled ability to manage a complex network.

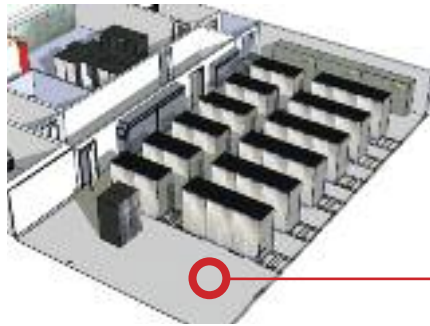
- **483 Senior IT leaders list intelligence, security and disaster recovery as their top 3 concerns** ¹
- **82 % of IT professionals say downtime was caused by IT personnel making errors when configuring changes** ²
- **The average cost per downtime incident is \$140K with the financial sector averaging \$540K per incident** ²

1 - 2013 SIM International IT Trends Study
2 - 2014 Avaya Network Downtime Study

Monitor Your Network.
Manage Your Network...
Protect Your Network...

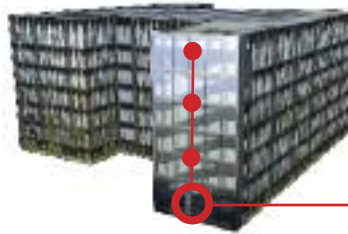
Wherever It Is

From the Data Center...



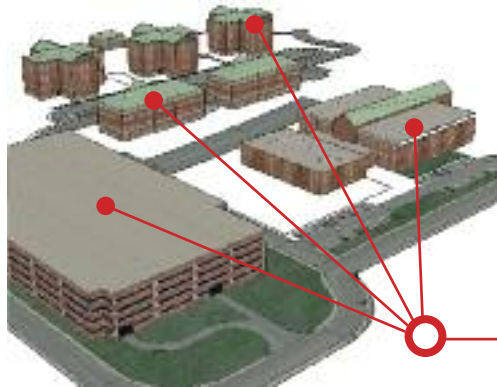
Centralized High-Density

To Multi-Floor Offices...



Centralized Mid-Density

To the Campus...



De-Centralized Low-Density

To your Global Branches.



Remote Low-Density

Monitor

Detailed Network Views

Hierarchical views map your entire network, from rack and cabinet infrastructure views, to work area and floor layouts - all with complete circuit diagrams, including active equipment. Circuit diagrams are also displayed locally on MapIT® G2's LCD-equipped Control Panels and Smart Patch Panels and Enclosures.

Database Accuracy

All network information is stored in a software-driven database, which is automatically updated in real time as moves, adds and changes are made, ensuring that the network condition is known at all times.

Maximizes Utilization of Networking Assets

EagleEye™ Connect utilization reports let you see available switch or patch panel ports. End devices can be tracked by location, equipment type, manufacturer, service or other criteria, providing better visibility and utilization of these critical assets.

Manage

Reduce Downtime

MapIT G2 circuit trace capability quickly identifies the location of a fault in a channel - information can be displayed on MapIT panels to guide onsite staff, drastically reducing the time required to find and fix a network outage.

Better Manage Remote Sites

MapIT provides a real-time view of networks at remote offices, helping to ensure compliance with corporate IT policies and discouraging unauthorized changes to the network.

Streamlines Work Order Process

Use EagleEye Connect integrated work order module to ensure that orders are completed properly.

Also, work orders can include pictures of circuit traces, rack views and floor layouts, providing useful visual aids for technicians.

Protect

Real-Time Alerts

EagleEye Connect can send e-mail alerts to IT or security staff in real time when unauthorized events occur on the network — such as detecting unauthorized devices attempting to connect to your LAN.

Regulatory Compliance

EagleEye Connect maintains an audit log of all network events, simplifying compliance with regulatory mandates, such as Sarbanes-Oxley, ITIL, HIPAA, FDA 21 CFR Part II, etc.

Improve Response Time

EagleEye Connect software features a robust search engine. Help desk staff can use this feature to quickly locate any item on your network and view its attributes and connections.

MapIT® G2 - The New Intelligence

Despite the benefits to network professionals, AIM systems have earned a reputation as difficult and complicated to implement. As much as the management efficiencies and security capabilities of these systems provide a clear and immediate impact on network operations, their perceived complexity was seen as a barrier to some.

MapIT G2 was developed specifically to eliminate that complexity. By bringing intelligence directly to the patch panel and fiber enclosure, systems are deployed faster with better function. User-friendly 1U MapIT G2 Control Panels can monitor up to 2880 of these smart ports each via simple bus connections. These control panels then provide a central interface to the EagleEye™ software - a single connection to your entire network.

And MapIT G2's unique benefits don't stop there. . .

Interactive

Smart panels and fiber enclosures feature a graphic LCD for patch cord tracing, diagnostics and technician guidance. The LCD can also display dynamic labeling information pulled directly from the EagleEye database.



Powerful

The MCP collects data from all panels in the system and relays it to the MapIT database. This advanced device provides a large LCD screen and keypad to interface to the EagleEye Connect software – eliminating the need for technicians to access the software directly.

Reliable

MapIT G2 is built for reliability. All components have been through extensive durability testing and exceed a 20-year MTBF (Mean Time Between Failures). If that weren't enough, we also built in redundant power and Ethernet connections into the Master Control Panel. Finally, the entire system is modular and in the unlikely event that any component fails, it can be replaced or repaired without disrupting critical network connections and applications.



Green

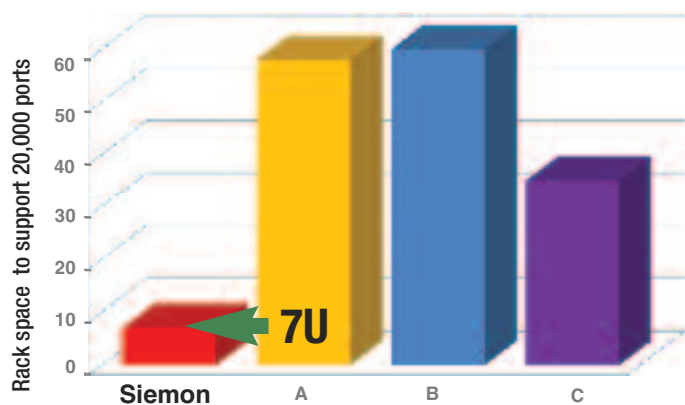


Up to 75% Lower Power Consumption

In addition to all the state-of-the-art features MapIT® G2 has to offer, it uses much less power than competing systems. In fact, MapIT G2 uses up to 75% less power than other intelligent cable management systems. It also features time out settings, which can reduce power consumption even further.

Reduced Heat Generation

MapIT G2 components are optimized to run cool in data center applications. All components generate virtually no heat and do not require cooling fans. Additionally, the components are very low profile (1U) so they do not impede airflow in cabinets.



Compact

Up to 80% Higher Density

MapIT G2 innovative design dramatically reduces the amount of rack space required for automated infrastructure management components. Because the intelligence is built into the patch panels, MapIT G2 provides up to 80% better density than competing systems. For example, some systems require up to 60 rack mount spaces to manage 20,000 ports. MapIT G2 can manage the same number of ports with only 7U of rack space.

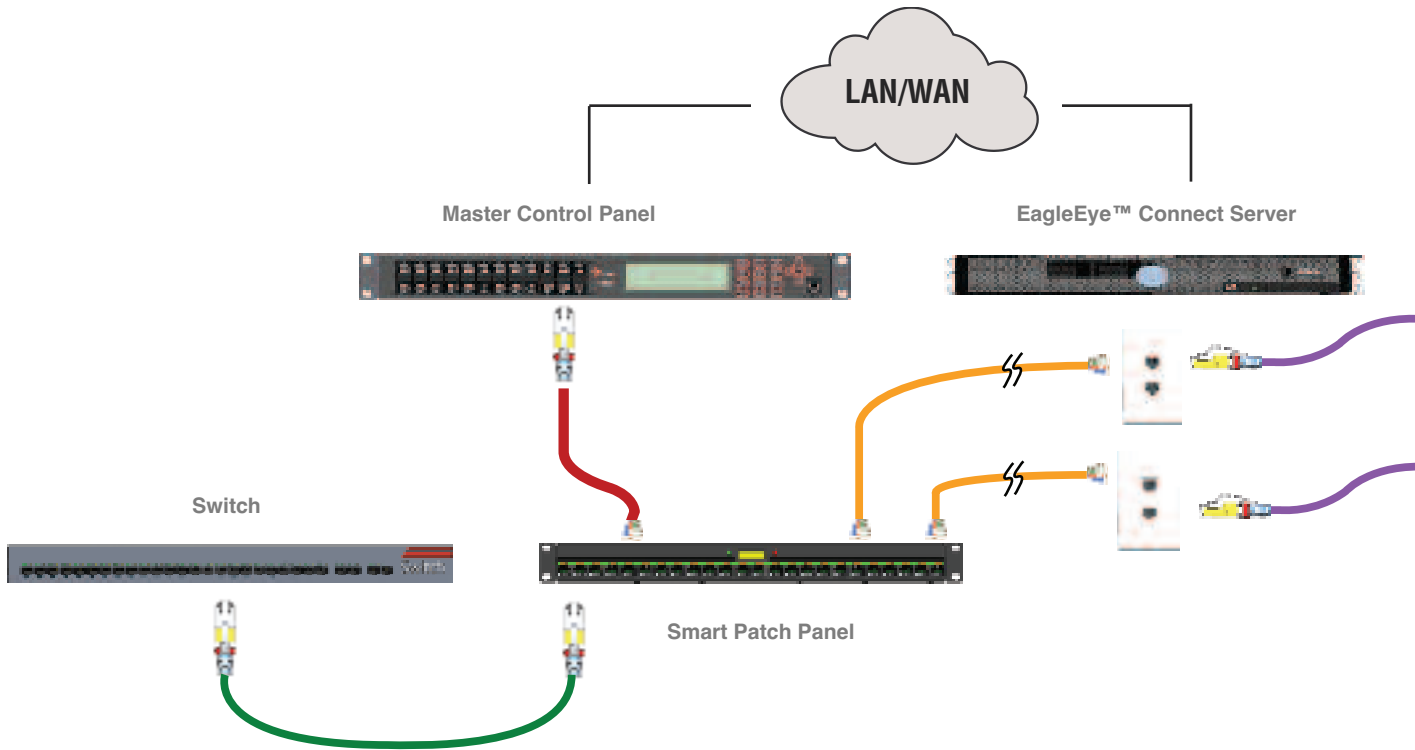
Efficient

Up to 76% Reduction in Pathway Space Usage

With intelligence built into the Smart Patch Panels and fiber enclosures, there's no need to run individual cable from a central analyzer or scanner to each panel. This reduces the amount of pathway space required to connect the intelligent system. For example, in even a medium size closet with about 2,000 managed ports, the cable required to connect MapIT G2 components requires up to 76% less pathway space versus competing systems.



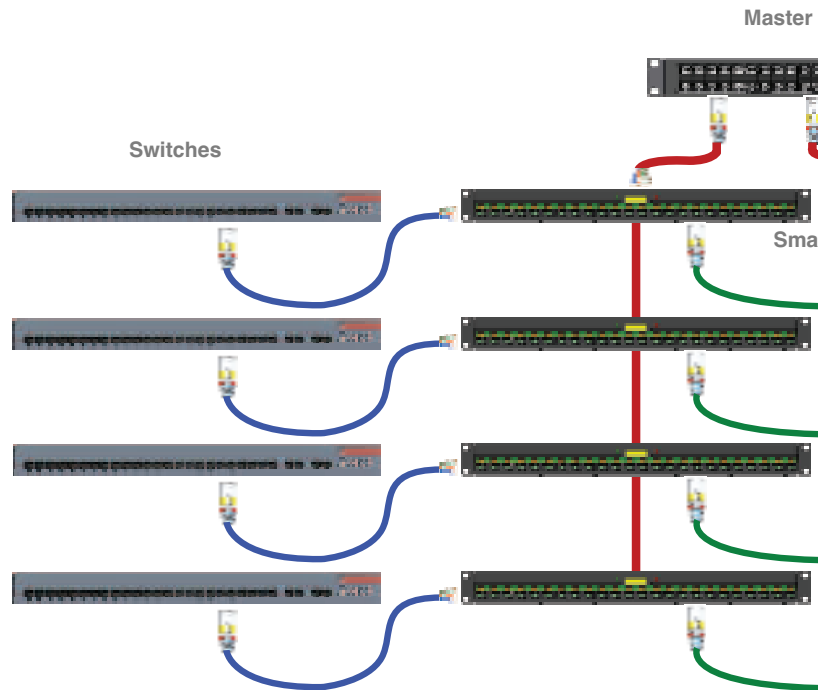
MapIT® G2 Topologies



Data Center Cross-Connect ▶▶

With the enhanced flexibility requirements of a data center, an additional layer of standard connectivity is added to the MapIT G2 system.

As in the TR, switches are linked into the Smart Panel cross-connect. These Smart Panels are connected to the servers via standard horizontal cabling, patch panels and patch cords. This configuration allows MapIT G2 to monitor critical connections with a high degree of accuracy.

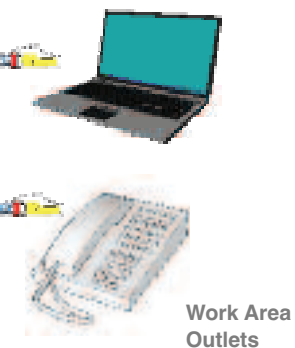


◀◀ Telecommunications Room Interconnect

In the TR, the MapIT G2 system is deployed very much like a traditional infrastructure.

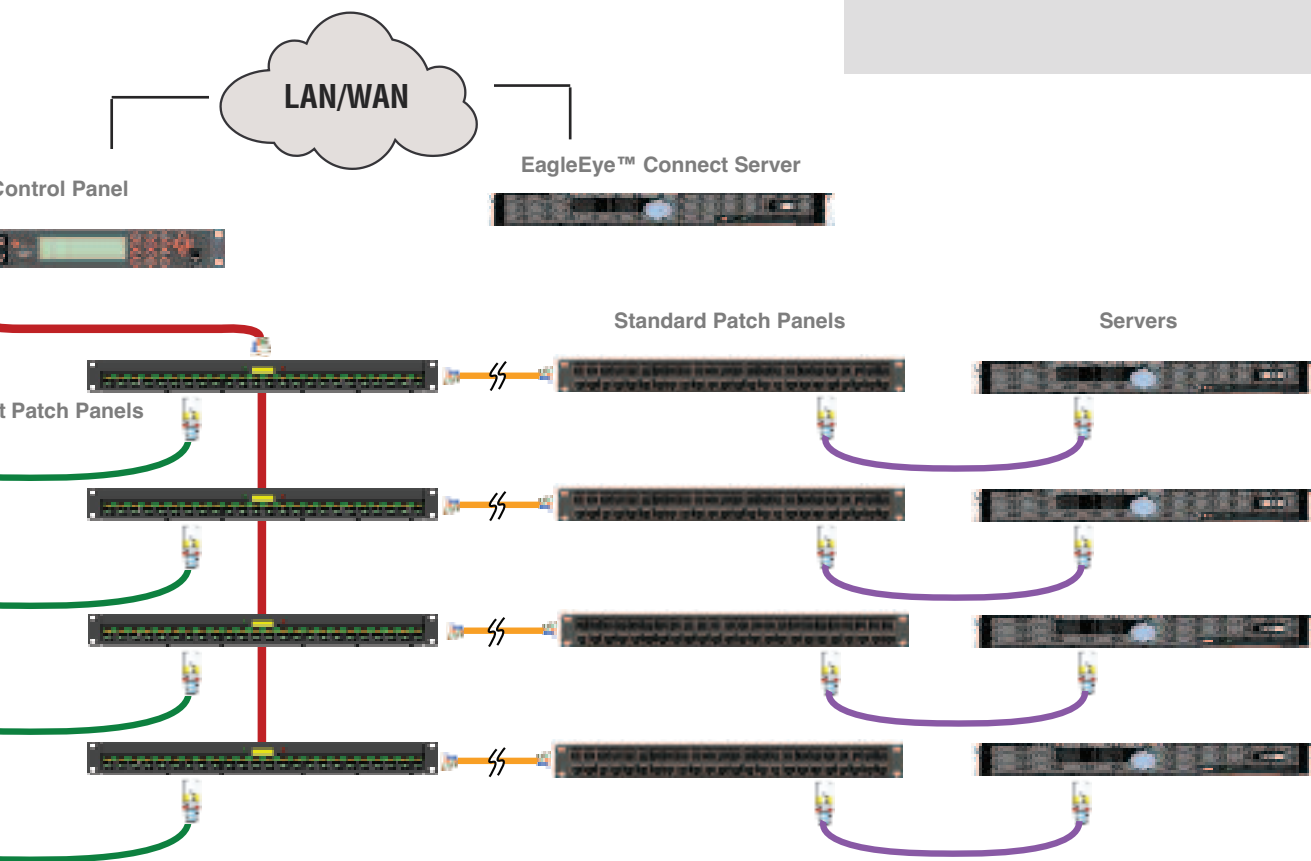
Switches connect directly to Smart Patch Panels. Sensor enabled patch cords are employed to manage the connection between switch ports and Smart Panels, which are in turn connected to the MapIT G2 Master control panel via category 5e control cords.

Horizontal and work area connections use standard (non-MapIT) connectivity, making MapIT G2 system implementation simple and straightforward.



Legend:

- Solid IC Equipment Cord
- Sensor-Enabled MapIT G2 Patch Cord
- Category 5e Cable for Control Connection
- Horizontal Cable
- Standard Patch Cord



EagleEye™ Connect Software



EagleEye Connect software provides the critical central interface for the entire MapIT G2 system. These server-based software options collect, monitor and store network intelligence data from MapIT G2 Smart Panels and connectivity, delivering this information in a robust and user-friendly set of network management features.

▶ A powerful yet easy-to-use software family for data centers and enterprise management

EagleEye Connect software extends network resources, providing the same level of control to both centralized and remote sites from a single management point.



- DOCUMENTATION**
Real-time physical layer documentation and monitoring including discovery of IT devices, interactive floor images, rack elevations and end-to-end circuit traces
- ASSET MANAGEMENT**
Real-time database with auto-discovery stores status and location of all cabling and IT assets to minimize troubleshooting time and maximize equipment and rack utilization
- ENHANCED SECURITY**
Software detects and records all physical network activity and provides instant alerts on unauthorized access or modification
- WEB-BASED**
Web-based application enables access from virtually any device, anywhere
- STREAMLINED WORK ORDERS**
The work order module assigns, directs and tracks work orders, ensuring accuracy, speed and documentation of activity

Ordering Information:

Part Number	Description
EE-SWL-CNT*	EagleEye Connect Software Per FMA
EE-MN1-CNT	EagleEye Connect Maintenance Per FMA
EE-MN3-CNT	EagleEye Connect Maintenance Per FMA, 3 year

**Includes free maintenance/support for 1 year from initial installation. FMA = Floor Mounted Asset Visit www.siemon.com/eagleeye for more information including system requirements*



SPP



MCP



EagleEye Connect or Enterprise Software

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 feature 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, MapIT G2 virtually eliminates the need for technicians to carry mobile devices or directly access the EagleEye software. 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

75% 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 help to maximize 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 diagnostics and more, improving efficiency in maintenance and MAC work

□ EASE OF IMPLEMENTATION

Simple design and straightforward setup reduces the time to design and install the system



MCP Graphic LCD



Redundant power and Ethernet



Field-terminated control connections

Ordering Information:

- M-MCP..... MapIT G2 Master Control Panel, 1U, black*
- M-DCP..... MapIT G2 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. Probe pen not included with Distribution Control Panel (M-DCP) Note: 1U = 44.5mm (1.75 in.)*

MapIT G2 Interconnect Solution for Copper Systems

MapIT G2 is compatible with an interconnect topology allowing users to track switch to copper smart patch panel port connections. The MapIT G2 Interconnect Module is used to create a link between switch and panel port connections during initial installation or during moves, adds and changes.

- M-ICM.....MapIT G2 Interconnect Module



MapIT® G2 Copper Systems

MapIT G2 Smart Patch Panels

The MapIT G2 Smart Patch Panel (SPP) is an industry first in Automated Infrastructure Management. The panel features on-panel intelligence including a combination of LEDs and a backlit graphic LCD to guide technicians. The LCD can be used to display patch cord trace and diagnostic information. It can also guide technicians during MAC work, which can increase accuracy and productivity. Since it is actively connected to your database, you could even use it as a virtual labeling system, dynamically displaying panel and port information directly from the MapIT G2 database.

Ordering Information:

MapIT G2 Smart Patch Panel

M-SPP(X)-K24ENSMapIT 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

Use (X) to specify panel type: Blank = Flat, A = Angled



MapIT G2-Ready Patch Panel

M-SPP(X)-K24E-001MapIT 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-24MapIT 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)

Use (X) to specify panel type. Blank = Flat, A = Angled

MapIT G2 Patch Cords

These advanced cords feature a 9th wire and gold-plated sensor pin contained in a robust over-molded boot. This embedded sensor technology enables tracking of connections between Smart Patch Panel ports.



MapIT G2 Sensor-Enabled Copper Patch Cords:

M-10GMCS-(XX)M(XX)L..... Category 6A shielded, double-ended, stranded modular cord, color-matching boot, T568A/B, LSOH

Length	Jacket Color
01 - 1 meter (3.3 ft.)	02 - White
02 - 2 meter (6.6 ft.)	04 - Gray
03 - 3 meter (9.8 ft.)	06 - Blue
05 - 5 meter (16.4 ft.)	

M-MC6-(XX)-(XX)..... Category 6 UTP, double-ended, stranded modular cord, color-matching boot, T568A/B, CMG

Length	Jacket Color
03 - 0.91 meter (3 ft.)	02 - White
05 - 1.52 meter (5 ft.)	04 - Gray
07 - 2.13 meter (7 ft.)	06 - Blue
10 - 3.05 meter (10 ft.)	
15 - 4.57 meter (15 ft.)	
20 - 6.10 meter (20 ft.)	

M-10GMC-(XX)-(XX)..... Category 6A UTP, double-ended, stranded modular cord, color-matching boot, T568A/B, LSOH

Length	Jacket Color
03 - 0.91 meter (3 ft.)	02 - White
05 - 1.52 meter (5 ft.)	04 - Gray
07 - 2.13 meter (7 ft.)	06 - Blue
10 - 3.05 meter (10 ft.)	
15 - 4.57 meter (15 ft.)	
20 - 6.10 meter (20 ft.)	

Siemon Keystone Outlets

Z6A-SK01 Keystone shielded Z-MAX 6A outlet, black*, T568A/B
Z6A-K01 Keystone UTP Z-MAX 6A outlet, black*, T568A/B
Z6-K01 Keystone UTP Z-MAX 6 outlet, black*, T568A/B

*Other colors available on request.

MAPIT® G2 TERA® PATCH PANELS

Part #	Description
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



READY PANEL UPGRADE TO MAPIT G2

Part #	Description
M-SPPAT-PCBA-24	MapIT G2 TERA panel upgrade kit, PCB



MAPIT G2 TERA PATCH CORDS - 4 PAIR

Part #	Description
M-T4(X)-(XX)M-B(XX)L	S/FTP Cable Assembly, Ivory Jacket, Colored Boot, LSOH

Plug Type	Boot Color
Blank = TERA 4 pair to TERA 4 pair	01 = Black
A = TERA to 6A RJ45 T568B wired	02 = White
B = TERA to 6A RJ45 T568A wired	03 = Red
	04 = Gray
	06 = Blue

Cord Length
01 = 1m (3 ft.)
02 = 2m (6 ft.)
03 = 3m (9 ft.)
05 = 5m (16 ft.)



MAPIT G2 TERA PATCH CORDS - 2 PAIR

Part #	Description
M-T2E2-(XX)M-B(XX)L	TERA to 5e Screened RJ45 Cable Assembly, Ivory Jacket, Colored Boot, LSOH

Cord Length	Boot Color
01 = 1m (3 ft.)	01 = Black
02 = 2m (6 ft.)	02 = White
03 = 3m (9 ft.)	03 = Red
05 = 5m (16 ft.)	04 = Gray
	06 = Blue

MapIT® G2 Fiber Systems

MapIT G2 Smart Fiber Enclosure (SFE)

The MapIT G2 Smart Fiber Enclosure combines on-panel intelligence with robust MapIT connectivity and fiber management features for a best in-class intelligent fiber patching solution. The LCD can be used to display patch cord trace and diagnostic information. It can also guide technicians during MAC work, which can increase accuracy and productivity.

MapIT G2 Smart Fiber Enclosures

MTP to LC Plug and Play Fiber Enclosure - SMTP

- M-SMTP-LC5V48NSMapIT G2 LC 48-fiber LC-to-MTP Smart Fiber Enclosure, black, Multimode, OM4
Includes 24 duplex MM, LC adapters, cable ties, panel ground lug, fiber management clips, front management bar, label holder and labels
- M-SMTP-LCSM48NSMapIT G2 LC 48-fiber LC-to-MTP Smart Fiber Enclosure, black, Singlemode, OS1/OS2
Includes 24 duplex SM, LC adapters, cable ties, panel ground lug, fiber management clips, front management bar, label holder and labels SM, LC



LC to LC Fiber Enclosure - SFE

- M-SFE-LC48-NS.....MapIT G2 LC 48-fiber Smart Fiber Enclosure, black, Multimode OM3/OM4
Includes 24 duplex MM, LC adapters, cable ties, panel ground lug, fiber management clips, label holder and labels
- M-SFE-LC48-NSCMapIT G2 LC 48-fiber Smart Fiber Enclosure, black, Singlemode OS1/OS2
Includes 24 duplex SM, LC 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-LC5V48-01.....MapIT G2-Ready LC-to-MTP Enclosure, black, Multimode, OM4
Includes 24 duplex MM/LC adapters, cable ties, panel ground lug, fiber management clips, front management bar, label holder and labels



LC to LC Fiber Enclosure

- M-FE-LC48-01MapIT G2-Ready Enclosure, black, Multimode OM3/OM4
Includes 24 duplex LC adapters, cable ties, panel ground lug, fiber management clips, label holder and labels

Upgrade Kit for MapIT G2-Ready Fiber Enclosures

- M-SFE-PCBA-24MapIT G2 Upgrade Kit for MapIT G2 Ready Fiber Enclosure.
Includes PCB with built-in sensor pads, LED's and LCD display, new front panel cover, additional mounting hardware & components with instructions

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 G2 sensor technology – gold-plated sensor pins retained in robust molded connector clips.



MapIT G2 XGLO Multimode Duplex Jumpers:

- M-J2-LCLC5(X)-(XX) LC-LC duplex jumper, MapIT G2 XGLO 50/125 multimode fiber, aqua jacket, OFNR

MapIT G2 XGLO Singlemode Duplex Jumpers:

- M-J2-LCULCUL-(XX) LC-LC duplex jumper, MapIT G2 XGLO singlemode fiber, yellow jacket, OFNR

Performance	Length
L = OM2/OM3	01 - 1 meter (3.3 ft.)
V = OM4	03 - 3 meter (9.8 ft.)
	05 - 5 meter (16.4 ft.)

Length
01 - 1 meter (3.3 ft.)
03 - 3 meter (9.8 ft.)
05 - 5 meter (16.4 ft.)

Accessories

Power Supply

M-PS 6v, 3amp power supply, adapter/cord for MCP or DCP



Replacement Probe Pen

M-PEN MapIT G2 probe pen, 7.62m (25 ft.) cord



Solid IC Cords

ZC6A-S(XX)(X)-(X)(X) Z-MAX® 6A shielded (F/UTP) solid modular cord, blue jacket, clear boot

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

Jacket Type
P - Plenum
R - Riser

Wiring
A - T568B
T - T568A

Length
10 - 3 m (10 ft.)
20 - 6.10 m (20 ft.)
30 - 9.14 m (30 ft.)
40 - 12.1 m (40 ft.)
50 - 15.2 m (50 ft.)
60 - 18.2 m (60 ft.)



ZC6A-(XX)(X)-(X)(X) Z-MAX 6A UTP, solid modular cord, blue jacket, clear boot

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

Jacket Type
P - Plenum
R - Riser

Wiring
A - T568B
T - T568A

Length
10 - 3 m (10 ft.)
20 - 6.10 m (20 ft.)
30 - 9.14 m (30 ft.)
40 - 12.1 m (40 ft.)
50 - 15.2 m (50 ft.)
60 - 18.2 m (60 ft.)



IC6(X)-8(X)-(XX)-B(XX)(X) Category 6 UTP IC single-ended, solid modular cord

System
E - Premium 6
(Blank) - System 6

Jacket Type
P - Plenum (Blue Jacket)
(Blank) - Riser (Premium 6 - White Jacket, System 6 - Gray Jacket)

Wiring
A - T568B
T - T568A

Length
10 - 3 m (10 ft.)
20 - 6.10 m (20 ft.)
30 - 9.14 m (30 ft.)
40 - 12.1 m (40 ft.)
50 - 15.2 m (50 ft.)
60 - 18.2 m (60 ft.)

Color
01 - Black
02 - White
03 - Red
04 - Gray
05 - Yellow
06 - Blue
07 - Green
09 - Orange



Category 5e Shielded Cable for Bus Connections

9A5R4-E1-06-RIA CMR, CSA FT4, riser, blue jacket, 305m (1000 ft.) Reel (US)

9A5R4-E2 CMR, CSA FT4, riser, blue jacket, 305m (1000 ft.) Reel-in-Box (International)

Shielded RJ-45 Plugs

PS-8-8 8-position shielded modular plug with 8 contacts (compatible with Siemon PT-908 crimp tool)

110 Patch Plugs

S110P4 4-pair, field-terminated S110 patch plug (colored icons not included)

LockIT™ RJ-45 Outlet Lock

LL-05 LockIT RJ45 Outlet Lock, bag of 10, includes 1 LockIT Universal Key



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