

TERA® Category 8.2 Outlet and Plug

Originally designed as the interface for category 7A/class FA that has long been ahead of its time as the highest-performing twisted-pair copper cabling system available, Siemon's innovative TERA outlet and plug have been newly characterized to support Category 8.2. When installed as part of a TERA 8.2 solution, these outlets and plugs deliver transmission performance up to 2 GHz to support two-connector, 30-meter channels in high-speed 25 Gigabit (25GBASE-T) and 40 Gigabit (40GBASE-T) applications for switch-to-server connections in the data center. The TERA outlets are easily installed in Siemon's TERA-MAX® patch panels, while the plugs can be used to terminate 22 to 23 AWG solid or stranded S/FTP and F/FTP shielded cables into exact lengths. Both the TERA outlet and plug are backwards compatible with Category 7A/Class FA cabling systems.

Slim, compact design allows outlets to be side-stacked and are compatible with all MAX® series mounting hardware

Shielded quadrant design fully isolates pairs for optimum internal crosstalk performance

Fully shielded (S/FTP) cable and connector design eliminates alien crosstalk concerns

Robust termination of category 8.2 fully shielded (S/FTP) 22AWG cable

TERA connecting hardware ensures that critical contact seating surfaces are not damaged when unmated under remote powering current loads per IEC 60512-99-001.

TERA outlets and plugs assure proper termination of cable shield — no additional crimping or processes required for grounding cable

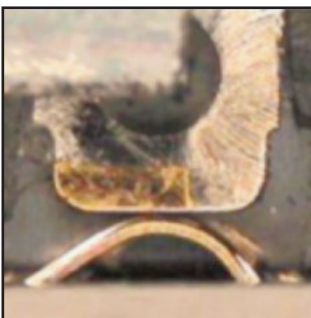
Outlets include a hinged door to prevent exposure to dust and other contaminants

STANDARDS COMPLIANCE

- ISO/IEC 11801-1 Ed.1.0
- IEC 61076-3-104
- IEC 60512-99-002
- UL/cUL
- Cable Sharing Compliant System
- TERA Channel Tempest Rated

APPLICATION SUPPORT

- 10BASE-T to 40BASE-T
- IEEE 802.3af (Type 1 PoE)
- IEEE 802.3at (Type 2 PoE)
- IEEE 802.3bt (Type 3 and Type 4 PoE)
- Power over HDBaseT (POH)
- Supports all applications designed to run over category 8.2 cabling systems or lower



Contact Integrity – Featuring Siemon's patented crowned jack contact geometry that improves electrical and mechanical performance and ensures that any jack or plug contact damage due to arcing caused by unmating under PoE load occurs well away from the final mated contact position.



TERA-MAX Panel - TERA outlets are compatible with 24 port flat and angled TERA-MAX patch panels.



TERA Category 8.2 Patch Cords - Are available in TERA-to-RJ45 for direct equipment connections.

Product Information

ELECTRICAL	
Contact Resistance	20 mΩ
Input to Output Resistance - Signal Contact	200 mΩ
Min. Dielectric Withstand Voltage (contact to contact)	1000 V DC or AC peak
Min. Dielectric Withstand Voltage	1500 V DC or AC peak
Insulation Resistance	500 MΩ
Backward Compatibility	to 5e, 6, 6A and 7A
Power over Ethernet (PoE)	Type 1 through Type 4

MECHANICAL-OUTLET	
Operating Temperature	-10 to 60 °C (14 to 140 °F)
Flammability Rating	UL 94 V-0
Green Features	RoHS, lead free, halogen free, PVC free
Housing Material	Diecast zinc alloy
Contact Materials	Plated copper alloy
Plastic Materials	Flame retardant thermoplastic
Dimensions with boot (LxWxH)	64.2x14.5x24.3 mm (2.5x.570x.95 in.)
Shielding	Quadrant design
Number of Plug Insertion Cycles	2500
Min Plug Retention Force	50N (11.24 lbf)
Plug Compatibility	IEC 61076-3-104

MECHANICAL-TERMINATION	
Wire Size Range (nominal)	22-26 AWG solid and stranded
Wire Insulation Diameter Range (max)	1.58 mm (0.062 in.)
Conductor OD (max)	0.64 mm (0.025 in.)
Cable OD (max)	9 mm (0.354 in.)
Re terminations	Not recommended

ORDERING INFORMATION

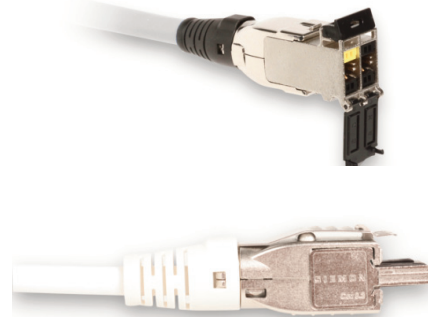
TERA® 4-Pair Outlet:

Part #	Description
T7F-01-1	TERA Outlet with black door, icon and boot, 22-24 AWG solid cable
T7F-01-2	TERA Outlet with black door, icon and boot, 26 AWG stranded cable

TERA Field-Terminated Plug

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 colored 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



Because we continuously improve our products, Siemon reserves the right to change specifications and availability without prior notice.

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