

# TERA® Category 8.2 Patch Cords

Part of the TERA 8.2 cabling solution, Siemon's Category 8.2 patch cords exceed ISO/IEC Category 8.2/Class II specifications when utilized in a 2-connector, 30-meter Class II channel. TERA Class II channels and permanent links deliver transmission performance up to 2 GHz to support high-speed 25 Gigabit and 40 Gigabit ethernet in data center applications. In conjunction with Category 8.2 cable and TERA-MAX® patch panels populated with TERA outlets, the Category 8.2 TERA-to-RJ45 patch cords are ideal for 2-connector switch-to-server connections in middle of row (MoR) and end of row (EoR) data center configurations. The Category 8 compatible RJ45-to-RJ45 patch cords are ideal in direct attach switch-to-server connections used in top of rack (ToR) configurations. Constructed of Category 8.2 S/FTP 2000 MHz cable, TERA Category 8.2 patch cords are backwards compatible with Category 7A/Class FA and lower cabling systems.

## High Performance Cable

Cords feature Category 8.2 S/FTP stranded cable for optimal transmission performance while eliminating alien crosstalk

## Standards-Compliant Interface

Recognized with ISO/IEC 11801-1 Ed. 1.0



## STANDARDS COMPLIANCE

- ISO/IEC 11801-1 Ed 1.0
- IEC-61156
- IEC 60603-7
- IEC 61076-3-104

## APPLICATION SUPPORT

- 10BASE-T to 40GBASE-T
- IEEE 802.3af (Type 1 PoE)
- IEEE 802.3at (Type 2 PoE)
- IEEE 802.3bt (Type 3 and Type 4)
- Power over HDBaseT (POH)

## Easy Color Coding

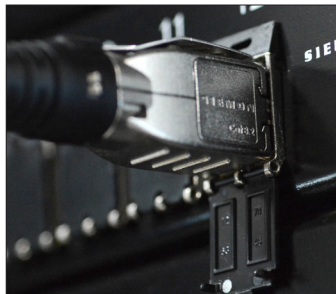
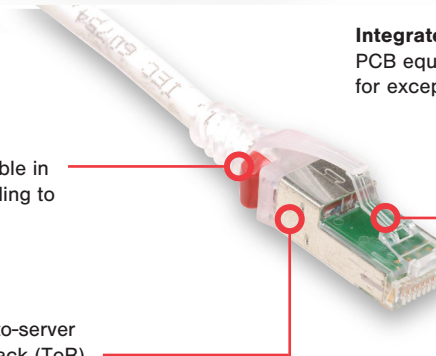
Removable color clips available in 9 colors allow field color coding to distinguish applications

## Category 8.2 Patching

Ideal in direct attach switch-to-server connections used in top of rack (ToR) configurations

## Integrated PCB

PCB equipped plug optimizes signal for exceptional transmission



## Modular Patching

The TERA 8.2 cords can be used in conjunction with TERA outlets that snap easily into TERA-MAX panels with integrated grounding.



## Future Proof Backwards Compatible

Supports autonegotiation for current 10 Gig to future 25/40 Gig speeds.



## RJ45 Interface

TERA to RJ45 patch cords allow the TERA Category 8.2 system to be easily connected to RJ45-equipped active electronics.

# Product Information

## PERFORMANCE SPECIFICATIONS

### CORD ASSEMBLY

<b>Wiring</b>	T568A/B as specified by part #
<b>Operating Temperature</b>	-20 to 70 °C (-4 to 158 °F)
<b>Remote Powering</b>	PoE Type 1, 2, 3, 4, UPoE, PoH
<b>Green Features</b>	RoHS, lead-free, halogen-free, PVC free
<b>Plastic Materials</b>	Flame retardant thermoplastic

### CABLE

<b>Wire Size Range (Nominal)</b>	26 AWG Stranded bare copper
<b>Construction</b>	S/FTP
<b>Cable OD (Nominal)</b>	6.3mm (0.25 in)
<b>Jacket type</b>	CM/LSOH
<b>Bend Radius</b>	2.52mm (0.1 in.)

### TERA PLUG SPECIFICATIONS

<b>Number of Insertion Cycles</b>	2500
<b>Minimum Mating/Unmating Force</b>	20N (4.5 lbf)
<b>Cable to Plug Tensile Strength (min)</b>	50N (11.24 lbf)H
<b>Mated Contact Resistance</b>	20 mΩ
<b>Input to Output DC Resistance</b>	200 mΩ (signal conductors), 100 mΩ (shield)
<b>Insulation Resistance (min)</b>	500 MΩ
<b>Minimum Dielectric Withstand Voltage</b>	1000 VAC contact to contact, 1500 VDC contact to shield
<b>Transfer Impedance</b>	100mΩ @ 10 MHz
<b>Current Rating @ 25°C (77°F)</b>	1.5 A
<b>Flammability Rating</b>	Contact Holder: UL94-V0, Plug Boot: UL-HB
<b>Contact Material</b>	Copper alloy with 50 microinches gold plating or equivalent
<b>Plug Housing Material</b>	Zinc Diecast, Nickel Plating

### RJ-45 PLUG SPECIFICATIONS

<b>Number of Insertion Cycles</b>	2500
<b>Minimum Mating/Unmating Force</b>	30N (6.7 lbf)
<b>Cable to Plug Tensile Strength (min)</b>	50N (11.24 lbf)H
<b>Mated Contact Resistance</b>	20 mΩ
<b>Input to Output DC Resistance</b>	200 mΩ (signal conductors), 100 mΩ (shield)
<b>Insulation Resistance (min)</b>	500 MΩ
<b>Minimum Dielectric Withstand Voltage</b>	1000 VAC contact to contact, 1500 VDC contact to shield
<b>Transfer Impedance</b>	200mΩ @ 10 MHz
<b>Current Rating @ 25°C (77°F)</b>	1.5 A
<b>Flammability Rating</b>	UL94-V0
<b>Contact Material</b>	Copper alloy with 50 microinches gold plating or equivalent
<b>Plug Housing Material</b>	Polycarbonate
<b>Screen</b>	360 degree enclosure around plug body

## Ordering Information

T48(X)-S(XX)M-02 ----- Category 8.2 Compatible TERA to RJ-45 modular plug, CM/LSOH cable, white jacket with matching TERA boot

<b>Wiring</b>	
A = T568B	
B = T568A	
<b>Cord Length</b>	
01 = 1 meter	
02 = 2 meter	
03 = 3 meter	
05 = 5 meter	

DA8-S(XX)M-02 ----- Category 8.2 Compatible RJ-45 to RJ-45 modular plug, CM/LSOH cable, T568A/B wiring, white jacket with clear boot

<b>Cord Length</b>	
01 = 1 meter	
02 = 2 meter	
03 = 3 meter	
05 = 5 meter	

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

<b>Clip Color</b>		
01 = Black	04 = Gray	07 = Green
02 = White	05 = Yellow	08 = Violet
03 = Red	06 = Blue	09 = Orange



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

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