# TX7000™ Shielded S/FTP Armored Copper Cable for Extreme Harsh Environments

#### specifications

Category 7 cable shall meet or exceed the IEC 61156-5 Category 7 component standard and be characterized to 1000 MHz. The conductors shall be 22 AWG stranded copper wire construction with foamed polyethylene insulation. The copper conductors shall be twisted in pairs each surrounded by a foil, covered with an overall braided shield and a thermoplastic copolymer inner jacket which is covered by a stainless steel armor and an oil-, fuel-, UV- and MUD-resistant halogen-free, fire-retardant LSZH (SHF2) jacket for use in harsh environment applications, including outdoor use.



#### technical information

Electrical performance:	Certified channel performance in a 4-connector configuration up to 100 meters and exceeds the requirements of ISO 11801 Class E <sub>A</sub> and ANSI/TIA-568-C.2 Category 6A standards for supporting 10GBASE-T transmission over twisted-pair cabling systems as part of the Panduit® TX6A™ 10Gig™ Shielded Copper Cabling System Certified component performance up to 100 meters and meets or exceeds the component requirement of the IEC 61156-5 Category 7 standard at swept frequencies up to 600 MHz	
Conductors/ insulators:	22 AWG stranded copper wire insulated with foamed polyethylene	
Standards compliance:	EN 50288-4-1, ISO/IEC 11801, IEC 61156-5, ANSI/TIA-568-C.2, DNV type approval 6-827.50-2, IEC 60092-359 (SHF2), NEK606, UL 2556 Section 4.2.8.5	
Certifications:	DNV certification number E-12713	
Flame rating:	IEC 60754-1, IEC 60754-2, IEC 61034-1, IEC 61034-2, IEC 60332-1-2, IEC 60332-3-22, IEC 60332-3-24	
PoE compliance:	Meets IEEE 802.3af and IEEE 802.3at for PoE applications	
Chemical resistance:	Mineral oil IRM 902 (IEC 60811-2-1) 24 hours/100°C (212°F) Diesel fuel IRM 903 (IEC 60811-2-1) 7 days/100°C (212°F)	
Installation tension:	100 N maximum (22 lbf)	
Temperature rating:	-40°C to 80°C during installation and operation (-40°F to 176°F)	
Cable jacket:	Oil-, fuel-, UV- and MUD-resistant, low smoke zero halogen (LSZH) jacket, SHF2	
Cable diameter:	Outer: 12.6mm (0.496 in.) nominal Inner: 10.0mm (0.394 in.) nominal	
Cable weight:	95 kg/500 m (209.4 lbs./1640 ft.)	
Packaging:	500 meters (1640 feet) on a reel Package tested to ISTA procedure 1A or 1B	

# key features and benefits

22 AWG stranded conductor wire	Provides exceptional signal strength and electrical performance for high vibration environments	
Individually foiled pairs with overall braided shield	Foil prevents coupling near-end crosstalk and alien crosstalk between pairs while shield reduces low-frequency external interference to ensure 10GBASE-T performance	
Robust jacketing	Oil-resistant, fuel-resistant, UV-resistant and MUD-resistant for harsh environments	
Stainless steel armor	Armored jacket of 304 grade stainless steel provides superior mechanical protection	
Tested beyond the standards	Cable has been characterized to 1000 MHz, 400 MHz above the standard	
Descending length cable markings	Easy identification of remaining cable reduces installation time and cable scrap	
Bulk packaging	Supplied in reels for ease of installation	
Third party tested	Exceeds the application requirements of Det Norske Veritas, and ETL	

# <u>applications</u>

The TX7000™ Shielded Copper Cable is a component of the TX6A™ 10Gig™ Shielded Copper Cabling System. This end-to-end system provides a cost-effective media for ensuring that the most challenging network bandwidth needs are easily met today and tomorrow. The durable flame-, oil-,

UV- and MUD-resistant jacket used in the TX7000™ S/FTP Shielded Copper Cable makes it the ideal choice for use in harsh environments, including outdoor use. The use of shielding in the cable, combined with the stainless steel armor, offers superior performance in uncertain high EMI environments for ultimate signal integrity.



TX6A™ 10Gig™ Shielded Copper Cabling System

TX7000™ S/FTP Copper Cable

LSZH: PSMDA7004BL\*-LED

Mini-Com® TX6A™ 10Gig Shielded Jack Module

Jack module: CJSM6X88

TX6 A™ 10Gig™ Shielded CM/LSZH Patch Cords

Feet: STP6X\*\*IG STP6X\*\*\*MIG

Mini-Com<sup>®</sup> Shielded Angled Modular Patch Panels

**24-port, 1 RU:** CPA24BLY **48-port, 2 RU:** CPA48BLY **48-port, 1 RU:** CPA48HDBL

Mini-Com<sup>®</sup> Shielded Flat Modular Patch Panels

**24-port, 1 RU:** CP24BLY **48-port, 2 RU:** CP48BLY **72-port, 2 RU:** CP72BLY **48-port, 1 RU:** CP48HDBL

#### Cable Prep Tools

Wire

tool:

snipping tool: CWST

Inner jacket

stripping tool: CJAST

Termination

base: NKSPB

**Termination** 

on EGJT

Shears:

s: DCET010

Outer jacket

stripping tool: CST114-157

For standard cable colors, replace BL (Black) with WG (Window Gray). For other cable colors please contact customer service.

\*\*For lengths 3 to 20 feet (increments of one foot) and 25, 30, 35, 40 feet, change the length designation in the part number to desired length. For standard cable colors other than IG (International Gray) substitute IG suffix with BL (Black), BU (Blue), GR (Green), RD (Red), YL (Yellow), OR (Orange), or VL (Violet) to the end of the part number. For example the part number for a blue, 15-foot patch cord is STP6X15BU.

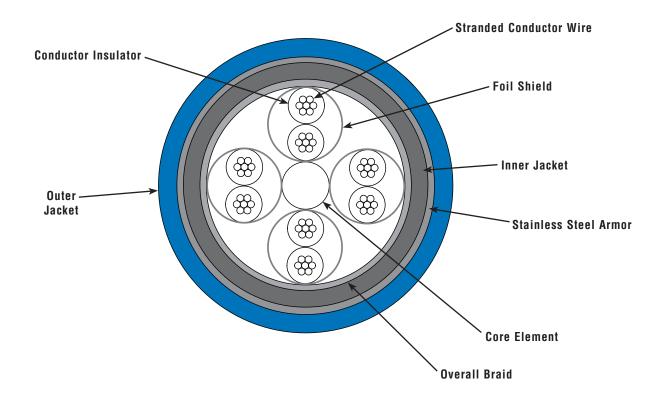
\*\*\*For lengths 1 to 10 meters (increments of one meter) and 1.5, 2.5, 15, 20 meters, change the length designation in the part number to the desired length. For standard cable colors other than IG (International Gray) substitute IG suffix with BL (Black) BU (Blue), GR (Green), RD (Red), YL (Yellow), OR (Orange), or VL (Violet) to the end of the part number. For example, the part number for a blue, 15-meter patch cord is STP6X15MBU.

## **TX7000™ Shielded S/FTP Armored Copper Cable for Extreme Harsh Environments**

### additional specifications

Mechanical Test	
Ultimate Breaking Strength	>400 N (90 lbf)
Minimum Bend Radius	Repeated: 15x cable diameter Single: 10x cable diameter
Electrical Test	
Nominal Velocity of Propagation (NVP)	72.5% nominal

#### cable construction



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