TX7000™ Shielded S/FTP 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 within an oil-, fuel-, UV- and MUD-resistant low smoke zero halogen (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_A 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-12714
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:	10.0mm (0.394 in.) nominal
Cable weight:	46.5 kg/500 m (102.5 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
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

applications

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 offers superior performance in uncertain high EMI environments for ultimate signal integrity.

Sidebar

TX6A™ 10Gig™ Shielded Copper Cabling System

TX7000™ S/FTP Copper Cable

LSZH:	PSMD7004BL-LED*

Mini-Com® TX6A™ 10Gig™ Shielded Jack Module

Jack module:	CJSM6X88

TX6A™ 10Gig™ Shielded CM/LSZH Patch Cords

Feet:	STP6X**IG
Meters:	STP6X***MIG

Mini-Com® Shielded Angled Modular Patch Panels

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

Mini-Com® 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 snipping tool:	CWST
Wire stripping tool:	CJAST
Termination base:	NKSPB
Termination tool:	EGJT

*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.
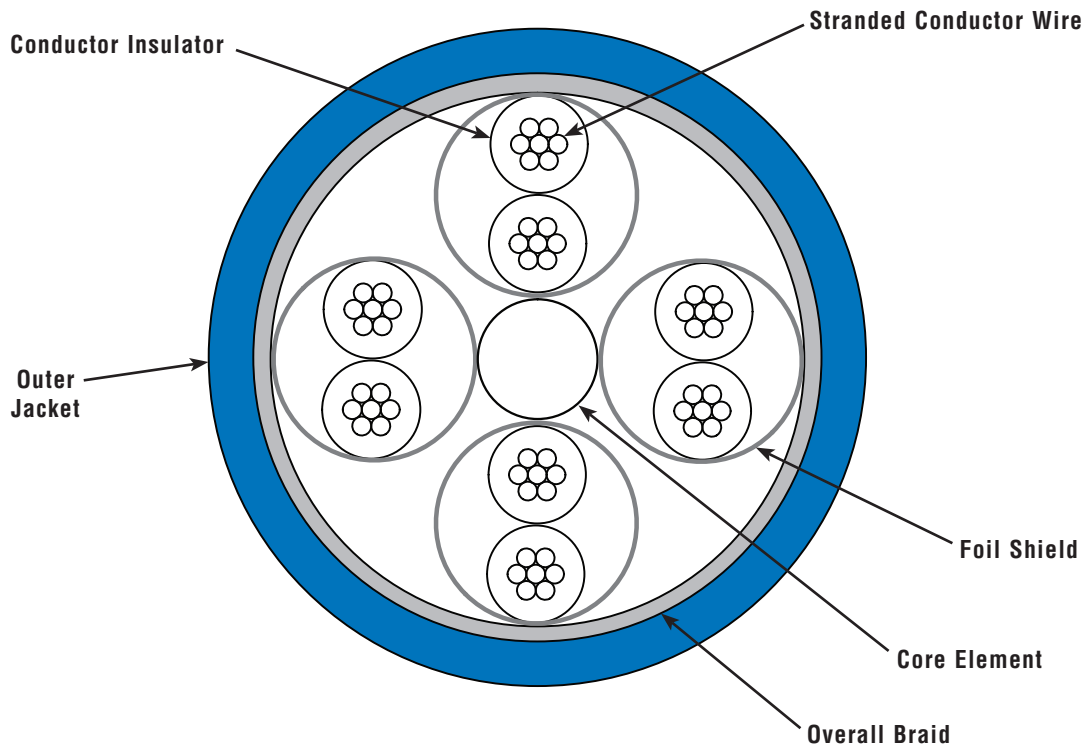
***For lengths 1 to 10 meters (increments of one meter) and 1.5, 2.5, 15, 20 meters, change the length designation in the part number to the desired length. For standard cable colors other than IG (International Gray) substitute IG suffix with BL (Black) BU (Blue), GR (Green), RD (Red), YL (Yellow), 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.

additional specifications

Mechanical Test	
Ultimate Breaking Strength	>400 N (90 lbf)
Minimum Bend Radius	Repeated: 10x cable diameter Single: 5x cable diameter
Electrical Test	
Nominal Velocity of Propagation (NVP)	72.5% nominal

cable construction

Conductor Insulator

Stranded Conductor Wire

Outer Jacket

Foil Shield

Core Element

Overall Braid

For a copy of Panduit product warranties, log on to www.panduit.com/warranty

For more information

Visit us at www.panduit.com

**Contact Customer Service by email: cs@panduit.com
or by phone: 800.777.3300**

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