TX6500™ Premium Category 6 U/UTP Copper Cable

specifications

Category 6 cable shall far exceed ANSI/TIA-568-C.2 and ISO 11801 Class E standards. The conductors shall be 23 AWG construction with FEP (CMP) or polyolefin (CMR) insulation. The copper conductors shall be twisted in pairs, separated by an integrated pair divider and shall be covered by a low smoke, flame-retardant (CMP) jacket or a flame-retardant (CMR) jacket.

technical information

Electrical performance:	Certified channel performance in a 4-connector configuration up to 100 meters and exceeds ANSI/TIA-568-C.2 Category 6 and ISO 11801 Class E standards at swept frequencies up to 250 MHz
	Certified component performance up to 100 meters and exceeds the component requirements of ANSI/TIA-568-C.2 Category 6 and IEC 61156-5 component standards at swept frequencies up to 250 MHz
Standards compliance:	UL Listed CMP-LP (0.5A) for Plenum
Conductors/insulators:	Plenum – 23 AWG bare copper wire covered by FEP insulation Riser – 23 AWG bare copper wire covered by polyolefin insulation
Flame rating:	Plenum – NFPA 262 and CSA FT-6 Riser – UL 1666 and CSA FT-4
PoE compliance:	Meets IEEE 802.3af, IEEE 802.3at and IEEE 802.3bt for PoE applications
Installation tension:	25 lbf. (110 N) maximum

Temperature rating:	Plenum – 32°F to 122°F (0°C to 50°C) during installation
	    -4°F to 194°F (-20°C to 90°C) during operation
	Riser – 32°F to 122°F (0°C to 50°C) during installation
	    -4°F to 167°F (-20°C to 75°C) during operation

Cable jacket:	Plenum – low smoke, flame-retardant PVC Riser – flame-retardant PVC
Cable diameter:	Plenum – 0.264 in. (6.7mm) nominal Riser – 0.265 in. (6.8mm) nominal
Cable weight:	Plenum – 32 lbs./1000 ft. (14.5 kg/305m) Riser – 30 lbs./1000 ft. (13.6 kg/305m)
Packaging:	1000 ft. (305m), EZ-Brake™ Reel-in-a-Box Packaging tested to ISTA Procedure 1A

key features and benefits

Third party tested	Cable has been tested as part of the TX6500™ Copper Cabling System by an independent laboratory and complies with the electrical channel requirements of the following standard: ANSI/TIA-568-C.2 Category 6
Guaranteed channel performance above the standards	Industry leading guaranteed channel performance above the TIA/ISO standards with headroom guarantee
Integrated pair divider	Separates pairs for exceptional cable performance
EZ-Brake™ Reel-in-a-Box	Ensures proper performance and provides quick installation
Tested beyond the standards the standard	Cable has been characterized to 600 MHz, 350 MHz above
Extended temperature range	Allows operation in 90°C (194°F) ambient environment providing error-free performance in high-density cabinets and large cable bundles running PoE+ or PoE++ applications
Reduced attenuation	Maximizes the amount of signal that reaches the receiver and increases bandwidth

applications

TX6500™ U/UTP Copper Cable is a component of the Panduit® TX6500™ Copper Cabling System. Interoperable and backward compatible, this end-to-end system provides design flexibility to protect network investments well into the future. With certified performance to the ANSI/TIA-568-C.2 Category 6 and ISO 11801 Class E standards, this system will support the following applications:

• Ethernet 10BASE-T, 100BASE-T (Fast Ethernet), 1000BASE-T (Gigabit Ethernet), 10GBASE-T (10 Gigabit Ethernet over limited distances as specified in the industry 10GBASE-T standards)

www.panduit.com

TX6500™ Category 6 UTP Copper Cabling System

TX6500™ Category 6 U/UTP Copper Cable

Plenum:	PUP6504*-UY
Riser:	PUR6504*-UY

Mini-Com® TX6™ PLUS UTP Jack Module

Jack module:	CJ688TG**

TX6™ PLUS UTP Patch Cords

Foot lengths:	UTPSP3***Y
Meter lengths:	UTPSP1M^Y

DP6™ PLUS Angled Punchdown Patch Panels

24-port, 1 RU:	DPA24688TGY
48-port, 2 RU:	DPA48688TGY

DP6™ PLUS Flat Punchdown Patch Panels

12-port:	DP12688TGY
24-port, 1 RU:	DP24688TGY
48-port, 2 RU:	DP48688TGY

GP6™ PLUS Category 6 Punchdown System

See website (www.panduit.com) or catalog for complete system information.

Cable Prep Tools

Wire snipping tool:	CWST
Wire stripping tool:	CJAST

*To designate color, add suffix BU (Blue), WH (White), YL (Yellow), or IG (Int'l Gray). For additional cable colors, contact customer service

**To designate color, add suffix IW (Off White), EI (Electric Ivory), IG (International Gray), WH (White), BL (Black), OR (Orange), RD (Red), BU (Blue), GR (Green), YL (Yellow), or VL (Violet).

***For lengths 1 to 20 feet (increments of one foot) and 25, 30, 35, 40 feet, change the length designation in part number to the desired length. For standard cable colors other than Off White, add suffix BL (Black), BU (Blue), GR (Green), RD (Red), YL (Yellow), OR (Orange), or VL (Violet) before Y at the end of the part number. For example, the part number for a blue 15-foot patch cord is UTPSP15BUY.
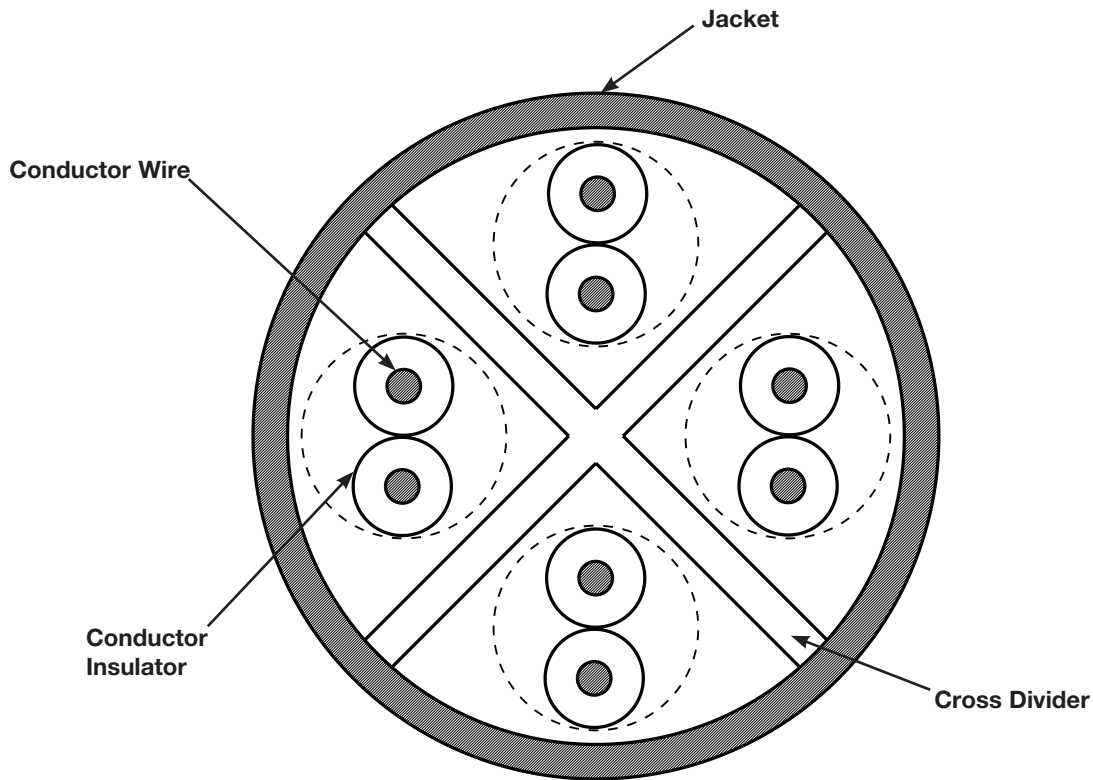
^For lengths 1 to 10 meters (increments of one meter) and 0.5, 1.5, 2.5, 15, 20 meters, change the length designation in the part number to the desired length. For standard cable colors other than Off White, add suffix BL (Black), BU (Blue), RD (Red), YL (Yellow), GR (Green), OR (Orange), or VL (Violet) before Y at the end of the part number. For example, the part number for a blue, 5-meter patch cord is UTPSP5MBUY.

additional specifications

Mechanical Test	
Ultimate Breaking Strength	>90 lbf (400N)
Minumum Bend Radius	4 x cable diameter
Electrical Test	
Nominal Velocity of Propagation (NVP)	CMP – 73% nominal CMR – 70% nominal
Operating Voltage, Maximum	80 V

cable construction

Jacket

Conductor Wire

Conductor Insulator

Cross Divider

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 and reference COSP258

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