TX6™ Category 6 UTP Copper Cable

specifications

Category 6 UTP cable shall meet ANSI/TIA-568-C.2 and IEC 61156-5 Category 6 component standards. The conductors shall be 24 AWG copper insulated with HDPE polymer. The copper conductors shall be twisted in pairs, separated by a cross divider and covered by a low smoke zero halogen or flame retardant PVC jacket.

technical information

Electrical performance:	Certified performance in a 4-connector configuration up to 100 meters, meets ANSI/TIA-568-C.2, ISO 11801 2nd Edition Class E and IEC 61156-5 Category 6 channel and component requirements
Conductor/insulator:	24 AWG solid copper insulated with HPDE
Certification:	ANATEL 2485-09-6246 for PUC6C04 and PUR6C04 ANATEL 2486-09-6246 for PUL6C04
Flame rating:	LSZH – IEC 60332-1, 60754-2, 61034; EN50575; Euroclass Dca – s2, d2, a1 PVC (CM) – UL 1685; EN50575: Euroclass Eca PVC (CMR) – UL 1666
PoE compliance:	Meets IEEE 802.3af and IEEE 802.3at for PoE applications
Installation tension:	110N (25 lbf) maximum
Temperature rating:	0° to 50°C (32° to 122°F) during installation -20° to 75°C (-4° to 167°F) during operation
Cable jacket:	LSZH – Low Smoke Zero Halogen PVC (CM) – PVC PVC (CMR) – Flame retardant PVC
Cable diameter:	5.9mm (0.233 in.) nominal
Cable weight:	LSZH – 12.5 kg/305m (27 lbs./1000 ft.) PVC (CM) – 12 kg/305m (26 lbs./1000 ft.) PVC (CMR) – 13 kg/305m (28 lbs./1000 ft.)
Packaging:	305m (1000 ft.) easy-pay-out box LSZH – 14.5 kg/305m (30 lbs./1000 ft.) PVC (CM) – 14 kg/305m (29 lbs./1000 ft.) PVC (CMR) – 15 kg/305m (31 lbs./1000 ft.) Packaged tested to ISTA procedure 1A

key features and benefits

Third party tested	Cable has been tested as part of the TX6™ Category 6 UTP 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 standard
Descending length cable markings	Easy identification of remaining cable reduces installation time and cable scrap
Cross divider	Separates twisted pairs for robust cable performance
Tested beyond the standards	Cable has been characterized to 350 MHz, 100 MHz above the standard
Easy payout box	Ensures proper performance and provides quick installation

applications

TX6™ UTP Copper Cable is a component of the Panduit® TX6™ UTP 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)
• 155 Mb/s ATM, 622 Mb/s ATM, 1.2 Gb/s ATM
• Token ring 4/16

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TX6™ UTP Copper Cabling System

TX6™ UTP Copper Cable

LSZH:	PUL6C04BU-C*
CM:	PUC6C04BU-C*
CMR:	PUR6C04BU-C*

Mini-Com® TX6™ PLUS UTP Jack Module

Jack module:	CJ688TGIWY**

TX6™ PLUS UTP Patch Cords – CM

Foot lengths:	UTPSP3^Y
Meter lengths:	UTPSP1^^MY

TX6™ PLUS UTP Patch Cords – LSZH

Foot lengths:	UTPSPL3^Y
Meter lengths:	UTPSPL^^1MY

DP6™ PLUS Punchdown Patch Panels

Angled, 24-port, 1RU:	DPA24688TGY
Angled, 48-port, 1 RU:	DPA48688TGY
Flat, 24-port, 1 RU:	DP24688TGY
Flat, 48-port, 2 RU:	DP48688TGY

Mini-Com® Flush Mount Modular Patch Panels

Angled, 24-port, 1 RU:	CPPA24FMWBLY
Angled, 48-port, 2 RU:	CPPA48FMWBLY
Flat, 24-port, 1 RU:	CPP24FMWBLY
Flat, 48-port, 2 RU:	CPP48FMWBLY

Termination and Cable Prep Tools

Termination tools:	EGJT or TGJT
Conductor snipping tool:	CWST
Conductor stripping tool:	CJAST

*For standard cable colors other than BU (Blue), replace BU in part number with WH (White) or IG (International Gray). Standard pallets are configured in 2 layers, 10 cartons per layer, total of 20 cartons per pallet. Add E to end of part number for European pallets which are configured in 2 layers, 7 cartons per layer, total of 14 cartons per pallet.

**For standard colors other than Off White (IW), replace suffix with EI (Electrical Ivory), IG (International Gray), AW (Arctic White, WH (White), BL (Black), BU (Blue), RD (Red), YL (Yellow), GR (Green), or VL (Violet). Add -24 to end of part number for 24 pack convenience package.

^For standard foot lengths other than 3 feet, replace the 3 in the part number with 1 to 20 feet (one foot increments) 25, 30, 35 or 40. For standard colors other than Off White, add suffix BU (Blue), RD (Red), YL (Yellow), or GR (Green) before the Y at the end of the part number. For example, the part number for a blue, CM, Category 6, 5-foot patch cord is UTPSP5BUY.
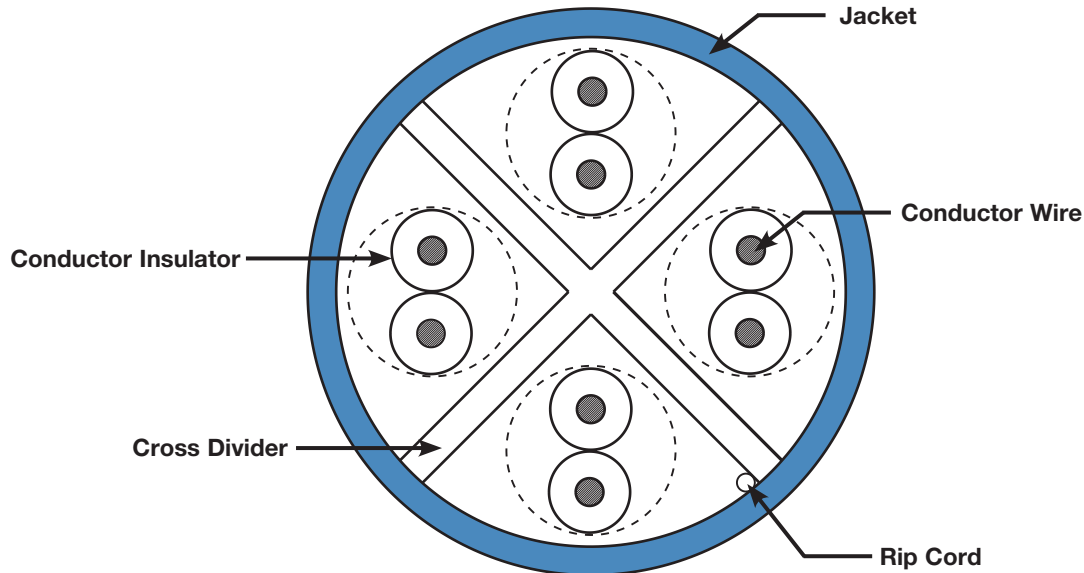
^^For standard meter lengths other than 1 meter, replace the 1 in the part number with 1– 10 meters (one meter increments) 0.5, 1.5, 2.5, 15, or 20. For standard colors others than Off White, add suffix BU (Blue), RD (Red), YL (Yellow), or GR (Green) before Y at the end of the part number. For example, the part number for a blue, CM, Category 6, 5-meter patch cord is UTPSP5MBUY.

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additional specifications

Mechanical Test	
Ultimate Breaking Strength	>400 N (90 lbf)
Minimum Bend Radius	4 x cable diameter
Electrical Test	
DC Resistance	<9.38 Ohm per 100m (328 ft.)
DC Resistance Unbalance	<5%
Mutual Capacitance	<5.6 nF per 100m (328 ft.)
Capacitance Unbalance	<330 pF per 100m (328 ft.)
Characteristic Impedance	100 Ohm +/-15% up to 100 MHz
Nominal Velocity of Propagation (NVP)	65%
Operating Voltage, Maximum	80V

cable construction

Jacket

Conductor Wire

Conductor Insulator

Cross Divider

Rip Cord

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