TX6A™ 10Gig™ UTP Copper Cable with Advanced MaTriX Technology

Europe, Middle East, Africa, Latin America, Asia Pacific



specifications

Category 6A/Class E_A cable shall be constructed of 23 AWG copper conductors with PE Riser (CMR), HDPE Low Smoke Zero Halogen (LSZH) or PVC (CM) insulation. The copper conductors shall be twisted in pairs and separated by a cross-divider. All four pairs shall be surrounded by advanced MaTriX tape and a flame retardant jacket. The advanced MaTriX tape shall suppress the effect of alien crosstalk allowing 10 Gb/s transmission, while minimizing cable diameter. The innovative cable design shall provide installation flexibility as cables can be routed in tight bundles through pathways and spaces.



technical information

Category 6A/Class E _A channel and component performance:	Certified channel performance in a 4-connector configuration up to 100 meters and exceeds the requirements of ANSI/TIA-568-C.2 Category 6A and ISO 11801 Class E _A standards for supporting 10GBASE-T transmission over twisted-pair cabling systems as part of the Panduit® TX6A™ 10Gig™ UTP Copper Cabling System. Certified component performance up to 100 meters and exceeds the ANSI/TIA-568-C.2 Category 6A and IEC 61156-5 Category 6A standards for supporting 10GBASE-T transmission over twisted-pair cabling systems	
Cable diameter:	PE Riser (CMR)/PVC (CM): 7.2mm (.285 in.) nominal HDPE (LSZH): 7.1mm (.280 in.) nominal	
Conductors/insulators:	23 AWG solid copper insulated with flame retardant PE (CMR) or HDPE (LSZH)	
Certification:	ANATEL 2511-12-6246 for PUL6AM04*-CEG	
Flame rating:	PE Riser (CMR): UL1666 HDPE (LSZH-1): IEC 60332-1, 60754-2, 61034-2 HDPE (LSZH-3): IEC 60332-3-25 (-3d), NBN C 30-004(F2), 60754-2, 61034-2 PVC (CM): IEC 60332-1 and UL 1685	
PoE compliant:	Meets IEEE 802.3af and IEEE 802.3at for PoE applications	
Segregation classification:	Meets EN 50174-2:2009 segregation classification C	
Installation tension:	25 lbf (110 N) maximum	
Temperature rating:	0°C to 60°C (32°F to 140°F) during installation -20°C to 75°C (-4°F to 167°F) during operation	
Cable jacket:	PE Riser (CMR) Low smoke flame retardant PVC HDPE (LSZH) PVC (CM): Flame retardant PVC	
Cable weight:	PE Riser (CMR): 16.8 kg/305m (36.9 lbs. / 1000 ft.) LSZH-1: 15.3 kg/305m (33.8 lbs./1000 ft.); 25.1kg/500m (55.4 lbs./1640 ft.) LSZH-3: 16.5 kg/305m (36.4 lbs./1000 ft.); 27.4 kg/500m (60.6 lbs./1640 ft.) PVC (CM): 19.2 kg/305m (42.4 lbs./1000 ft.)	
Packaging:	PE Riser (CMR): 18.8 kg/305m (41.3lbs. / 1000ft.) LSZH-1: 17.3 kg/305m (38.2 lbs./1000 ft.); 27.4 kg/500m (60.5 lbs./1640 ft.) LSZH-3: 18.5 kg/305m (40.8 lbs./1000 ft.); 29.7 kg/500m (65.6 lbs./1640 ft.) Package tested to ISTA procedure 1A PVC (CM): 21.2 kg/305m (46.8 lbs./1000 ft.)	

key features and benefits

MaTriX Technology	Best-in-class cable diameter delivers superior PSANEXT and PSAACRF suppression	
Interoperable	Compatible with components of the TX6A-SD™ 10Gig™ UTP Copper Cabling System with MaTriX Technology (70 meter solution) for increased design flexibility	
Superior headroom warranty	Provides the highest margins above the industry standard for both electrical and alien crosstalk performance	
Round cable design	Improves fill capacity, cable management, reduces required bend radius and allows efficient use of pathways and spaces	
Extended temperature range	Allows operation in 75°C (167°F) ambient environment providing error-free performance in high-density cabinets and large cable bundles running PoE+ or PoE++ applications	
Highest density	All testing and headroom based on 48-port/1RU panels	
Descending length cable markings	Easy identification of remaining cable to reduce installation time and cable scrap	

applications

The TX6A™ 10Gig™ UTP Copper Cable with MaTriX Technology is a component of the TX6A™ 10Gig™ Copper Cabling System. Interoperable and backward compatible, this end-to-end system provides design flexibility to protect network investments well into the future.

www.panduit.com

Key applications include:

- 10GBASE-T Ethernet
- Data center I/O consolidation
- Data center server virtualization
- Consolidation of network interconnects
- Back-bone aggregation
- Parallel processing and high speed computing

TX6A[™] 10Gig[™] UTP Copper Cabling System with Advanced MaTriX Technology

TX6A[™] 10Gig[™] UTP Copper Cable with Advanced MaTriX Technology

 PE Riser (CMR):
 PUR6AM04*-CG

 LSZH (60332-1):
 PUL6AM04*-CE+

 LSZH (60332-3):
 PUZ6AM04*-CE+

 CM:
 PUC6AM04*-CEG

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

Jack module:

CJ6X88TG**

Shuttered jack module:

CJH688TG**

TX6A™ 10Gig™ UTP Patch Cords with MaTriX Technology

Meter lengths: UTP6A^^M **Foot lengths:** UTP6A^

Mini-Com® Angled Modular Patch Panels

24-port, 1 RU: CPPA24FMWBLY **48-port, 2 RU:** CPPA48FMWBLY **72-port, 2 RU:** CPPLA72WBLY

Mini-Com® Flat Modular Patch Panels

 24-port, 1 RU:
 CPP24FMWBLY

 48-port, 1 RU:
 CPP48HDWBLY

 48-port, 2 RU:
 CPP48FMWBLY

 72-port, 2 RU:
 CPP72FMWBLY

For additional modular patch panels reference www.panduit.com

Cable Prep Tools

Wire snipping tool: CWST Wire stripping tool: CJAST

Cable bundle

organizing tool: CBOT24K

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

+ -CEG for 305m reels (18 reels/pallet), -CED for 500m reels (12 reels/pallet)

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

^Add length, then color to end of part number: 1M to 10M (one meter increments), 1.5M, 2.5M, 15M, and 20M. 3 to 20 feet (one foot increments), 25, 30, 35, and 40 ft. Color is off white unless color code is added to end: BL (Black), BU (Blue), RD (Red), YL (Yellow), GR (Green), OR (Orange), VL (Violet). Example: Blue, 5-meter patch cord is UTP6A5MBU

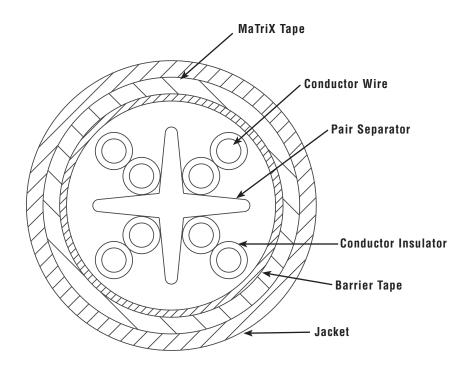
Contact Customer Service for keyed connectivity bulk packaged jack modules and patch cords.

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additional specifications

Mechanical Test			
Ultimate Breaking Strength	> 90 lbf (400 N)		
Minimum Bend Radius	4 x cable diameter		
Electric	cal Test		
DC Resistance	<9.38 Ohm per 328 ft. (100m)		
DC Resistance Unbalance	<5%		
Mutual Capacitance	<5.6 nF per 328 ft. (100m) at 1 kHz		
Capacitance Unbalance	<330 pF per 328 ft. (100m) at 1 kHz		
Characteristic Impedance	100 Ohm +/-15% up to 100 MHz		
Nominal Velocity of Propagation (NVP)	Panduit 67%		
Operating Voltage, Maximum	80V		

cable construction



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



