TX6A™ 10Gig UTP Copper Cable with Vari-MaTriX Technology

PANDUIT®

specifications

Category 6A/Class E_A cable shall be constructed of 23 AWG copper conductors with FEP Plenum (CMP) insulation. The copper conductors shall be twisted in pairs and separated by a cross-divider. All four pairs shall be surrounded by a metallic Vari-MaTriX tape cut into segments of varying length and a flame retardant jacket. The Vari-MaTriX tape shall minimize the cable diameter and suppress the effects of alien crosstalk while retaining UTP electromagnetic interference immunity.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 swept up to 650 MHz 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
Standards Compliance:	UL Listed CMP-LP (0.7A)
Cable diameter:	Plenum (CMP): 0.250 in. (6.4mm) nominal
Conductors/insulators:	23 AWG solid copper insulated with FEP (CMP), flame retardant PE
Flame rating:	Plenum (CMP): NFPA 262
PoE compliant:	Meets IEEE 802.3af, IEEE 802.3at and IEEE 802.3bt for PoE applications
Installation tension:	25 lbf (110 N) maximum
Temperature rating:	32°F to 140°F (0°C to 60°C) during installation -4°F to 194°F (-20°C to 90°C) during operation
Cable jacket:	Plenum (CMP): Flame retardant PVC
Cable weight:	Plenum (CMP): 31.2 lbs./1000 ft. (14.2kg/305m)
Packaging:	1000 ft. (305m) on a reel Plenum (CMP): 33.4 lbs./1000 ft. (15.2 kg/305m) Package tested to ISTA procedure 1A

key features and benefits

Vari-MaTriX Technology	PATENTED	Best-in-class cable diameter delivers superior PSANEXT and PSAACRF suppression while retaining UTP EMI immunity
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 worst-case margins above the industry standard for both electrical and alien crosstalk performance
Small, 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 90°C (194°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 Vari-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.

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

www.panduit.com

TX6A™ 10Gig UTP Copper Cabling System with Vari-MaTriX Technology

TX6A™ 10Gig UTP Copper Cable with Vari-MaTriX Technology

Plenum:	PUP6AV04*-G

Mini-Com® TX6A™ 10Gig UTP Jack Module

Jack module:	CJ6X88TG**
Shuttered jack module:	CJH6X88TG**

TX6A™ 10Gig UTP Patch Cords with MaTriX Technology

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

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.

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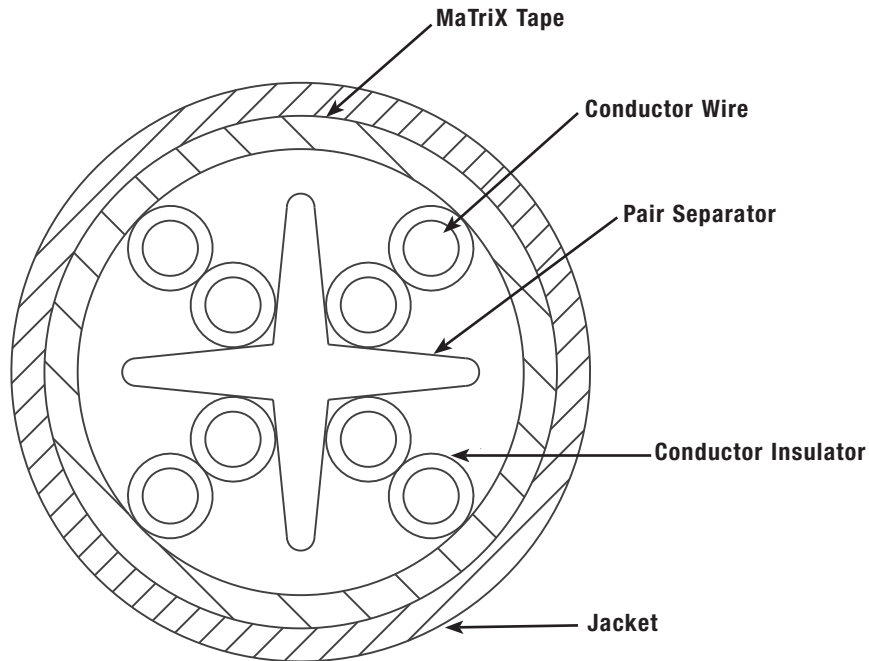
Contact Customer Service for keyed connectivity bulk packaged jack modules, and patch cords.

additional specifications

Mechanical Test	
Ultimate Breaking Strength	> 90 lbf (400 N)
Minimum Bend Radius	4 x cable diameter
Electrical 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

MaTriX Tape

Conductor Wire

Pair Separator

Conductor Insulator

Jacket

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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