

TX6A™ 10Gig™ UTP Copper Cable with MaTriX Technology

specifications


Category 6A/Class E_A cable shall be constructed of 23 AWG copper conductors with FEP Plenum (CMP), 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 matrix tape and a flame retardant jacket. The patent pending matrix tape shall suppress the effect of alien crosstalk allowing 10 Gb/s transmission. 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 6 _A standards for supporting 10GBASE-T transmission over twisted-pair cabling systems
Cable diameter:	FEP Plenum (CMP): 0.300 in. (7.6mm) nominal PE Riser (CMR): 0.300 in. (7.6mm) nominal HDPE (LSZH)/PVC (CM): 0.305 in. (7.7mm) nominal
Conductors/insulators:	23 AWG solid copper insulated with FEP (CMP), flame retardant PE (CMR), HDPE (LSZH), or PVC (CM)
Flame rating:	FEP Plenum (CMP): NFPA 262 PE Riser (CMR): UL 1666 HDPE (LSZH): IEC 60332-1 HDPE (LSZH): IEC 60332-3 PVC (CM): IEC 60332-1 and UL 1685
PoE compliant:	Meets IEEE 802.3af and IEEE 802.3at 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 167°F (-20°C to 75°C) during operation
Cable jacket:	FEP Plenum (CMP)/PVC (CM): Flame retardant PVC PE Riser (CMR)/HDPE (LSZH): Low smoke flame retardant PVC HDPE (LSZH): PVC Free
Cable weight:	FEP Plenum (CMP): 44 lbs./1000 ft. (20 kg/305m) PE Riser (CMR): 35 lbs./1000 ft. (16 kg/305m) HDPE (LSZH)/PVC (CM): 39 lbs./1000 ft. (17.5 kg/305m)
Packaging:	1000 ft. (305m) on a reel FEP Plenum (CMP): 48 lbs./1000 ft. (22 kg/305m) PE Riser (CMR): 39 lbs./1000 ft. (18 kg/305m) HDPE (LSZH)/PVC (CM): 50 lbs./1000 ft. (22.5 kg/305m) Package tested to ISTA procedure 1A

key features and benefits

Interoperable	Compatible with components of the TX6A-SD™ 10Gig™ UTP Copper Cabling System with MaTriX Technology (70 meter solution) for increased design flexibility
MaTriX Technology 	Provides superior suppression of both PSANEXT and PSAACRF; improves the installation flexibility by allowing cable combing in existing pathways without compromising performance
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 Plus applications
Cross-divider	Separates pairs for exceptional cable performance
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.

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 MaTriX Technology

TX6A™ 10Gig™ UTP Copper Cable with MaTriX Technology

Plenum:	PUP6A04*-UG
Riser:	PUR6A04*-UG ¹
LSZH (60332-1):	PUL6A04‡-+G
LSZH (60332-3):	PUZ6A04‡-EG
CM:	PUC6A04‡-EG

Mini-Com® TX6A™ 10Gig™ UTP Jack Module with MaTriX Split Foil Technology

Jack module:	CJ6X88TG**
Shuttered jack module:	CJD6X88TG**

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 snipping 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.

¹Substitute PUR6A04*-CG for alternative manufacturing location.

[‡]To designate color, add suffix BU (Blue) or WH (White). For additional cable colors, contact customer service.

⁺Add suffix E when ordering for countries in Europe, Middle East, or Africa.

^{**}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.

^{***}To designate color, add suffix BL (Black), BU (Blue), RD (Red), YL (Yellow), GR (Green), or OR (Orange). Each color represents a different keyed configuration.

[^]For lengths 3 to 20 feet (increments of one foot) 20, 25, 30, 35, or 40 feet 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) to the end of the part number. For example, the part number for a blue 15-foot patch cord is UTP6A15BU.

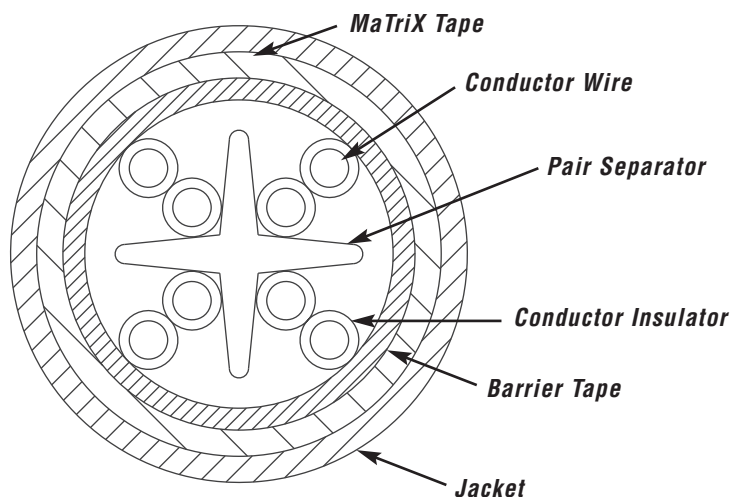
^{^^}For lengths 1 to 10 meters (increments of one meter) 1.5, 2.5, 15, or 20 meters change the length designation in the part number to the desired length. For standard cable colors other than Off White, add suffix BL (Black), BU (Blue), RD (Red), YL (Yellow), GR (Green), OR (Orange), or VL (Violet) to the end of the part number. For example, the part number for a blue 15 meter patch cord is UTP6A15MBU. Contact customer service for keyed connectivity bulk packaged jack modules, and patch cords.

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Additional Specifications

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

Cable Construction



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For more information

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