

TX6A™ U/UTP Copper Cable Standard Compliant Plus

Canada and
Latin America

PANDUIT™
SPECIFICATION SHEET

SPECIFICATIONS

Category 6A/Class E_A cable shall be constructed of 23 AWG copper conductors with foamed PE and HDPE insulation. The copper conductors shall be twisted in pairs and separated by a tape divider. All four pairs shall be surrounded by a metallic AXT barrier tape and a flame retardant (CMR) jacket. The AXT barrier tape shall minimize the cable diameter and suppress the effects of alien crosstalk while retaining electromagnetic interference immunity. The small cable diameter shall maximize cable density such that existing pathways can be utilized when upgrading from Category 6 cabling.



TECHNICAL INFORMATION

Category 6A/Class E_A channel and component performance:	Certified channel performance in a 4-connector configuration up to 100m and exceeds the requirements of ANSI/TIA-568.2-E 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 TX6A U/UTP Copper Cabling System. Certified component performance up to 100m and exceeds the ANSI/TIA-568.2-E Category 6A and IEC 61156-5 Category 6A standards for supporting 10GBASE-T transmission over twisted-pair cabling systems
Cable diameter:	6.3mm (0.248 in.) nominal
Insulation diameter:	1.07mm - 1.21mm (0.042 in. - 0.048 in.)
Conductors/insulators:	23 AWG solid copper insulated with foamed PE and HDPE
Flame rating:	UL 1666
PoE Compliant	Meets IEEE 802.3af, IEEE 802.3at and IEEE 802.3bt for PoE applications
Installation tension:	110 N (25 lbf.) maximum
Temperature rating:	0°C to 50°C (32°F to 122°F) during installation -20°C to 75°C (-4°F to 167°F) during operation
Cable jacket:	Flame retardant PVC (CMR)
Cable weight:	14 kg/305m (31 lbs./1000 ft.)
Packaging:	305m (1000 ft.) on a reel Packaged tested to ISTA Procedure 1A

KEY FEATURES AND BENEFITS

Superior headroom warranty:	Provides the highest worst-case margins above the industry standard for both electrical and alien crosstalk performance
High density 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/1 RU panels
Descending length cable markings:	Easy identification of remaining cable to reduce installation time and cable scrap

TX6A U/UTP Copper Cable

CMR:

PUR6XHD04**-G

**Colors: BU (Blue), WH (White), RD (Red), OR (Orange), YL (Yellow), GR (Green), VL (Violet), IG (International Gray), orBL (Black).

For additional cable colors, contact customer service.

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APPLICATIONS

The TX6A U/UTP Copper Cable with Standard Compliant Plus technology is a component of the TX6A 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

ADDITIONAL SPECIFICATIONS

Mechanical Test	
Ultimate breaking strength:	> 90 lbf (400 N)
Minimum bend radius:	8 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:	< 160 pF per 328 ft. (100m) at 1 kHz
Characteristic impedance:	100 Ohm +/-15% up to 100 MHz
Nominal velocity of propagation (NVP):	65% nominal
Operating voltage, maximum:	80 V

ENGINEERING DRAWINGS

