

TX6A™ U/UTP Copper Cable: Vari-Matrix High Density (HD)

SPECIFICATIONS

Category 6A/Class E_A cable shall be constructed of 23 AWG copper conductors with FEP insulation. The copper conductors shall be twisted in pairs. All four pairs shall be surrounded by a metallic Vari-MaTriX tape cut into segments of varying length and a flame retardant (CMP) jacket. The Vari-MaTriX tape shall minimize the cable diameter and suppress the effects of alien crosstalk while retaining U/UTP electromagnetic interference immunity. The small cable diameter shall maximize cable density such that existing pathways can be utilized when upgrading from Category 6 cabling.



TX6A™ U/UTP Copper Cable with Vari-Matrix HD Technology

CMP: PUP6AHD04*-G

**Colors: BU (Blue), WH (White), RD (Red), OR (Orange), YL (Yellow), GR (Green), VL (Violet), IG (International Gray), or BL (Black)
For additional cable colors, contact customer service.

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 Panduit® 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
Standards compliance:	UL Listed CMP-LP (0.7A)
Cable diameter:	0.230 in. (5.8mm) nominal
Insulation diameter:	0.039 in. - 0.047 in. (0.99mm - 1.19mm)
Conductors/insulators:	23 AWG solid copper insulated with FEP
Flame rating:	NFPA 262
PoE/PoH 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 221°F (-20°C to 105°C) during operation
Cable jacket:	Flame retardant PVC
Cable weight:	30 lbs./1000 ft. (14 kg/305m)
Packaging:	1000 ft. (305m) on a reel Package tested to ISTA procedure 1A

KEY FEATURES AND BENEFITS

Vari-MaTriX HD Technology:	Best-in-class cable diameter delivers superior PSANEXT and PSAACRF suppression while retaining U/UTP EMI immunity
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 105°C (221°F) ambient environment providing error-free performance in high-density cabinets and large cable bundles running PoE+ or PoE++ applications
Highest port 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

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APPLICATIONS

The TX6A™ U/UTP Copper Cable with Vari-MaTriX HD 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:	> 400 N (90 lbf)
Minimum bend radius:	4 x cable diameter
Electrical Test	
Nominal Velocity of Propagation (NVP):	70% nominal
Operating voltage, maximum:	80 V

ENGINEERING DRAWING

