

TX6™ Category 6 U/UTP Copper Cable

SPECIFICATIONS

Category 6 UTP cable shall meet ANSI/TIA-568.2-E and IEC 61156-5 Category 6 component standards. The conductors shall be 24 AWG copper insulated with HDPE polymer. The copper conductors shall be twisted in pairs, separated by a cross divider and covered by a low smoke zero halogen or flame retardant PVC (CMR) jacket.



TX6 U/UTP Copper Cable

CMR: PUR6C04**M

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

TECHNICAL INFORMATION

Electrical performance:	Certified performance in a 4-connector configuration up to 100m, meets ANSI/TIA-568.2-E, ISO 11801 Class E and IEC 61156-5 Category 6 channel and component requirements
Insulation diameter:	0.91 - 1.01mm (0.036 in. - 0.039 in.)
Conductor/insulator:	24 AWG solid copper insulated with HPDE
Flame rating:	UL 1666
PoE compliance:	Meets IEEE 802.3af, IEEE 802.3at and IEEE 802.3bt for PoE applications
Installation tension:	110N (25 lbf) maximum
Temperature rating:	0° to 50°C (32° to 122°F) during installation -20° to 75°C (-4° to 167°F) during operation
Cable jacket:	Flame retardant PVC (CMR)
Cable diameter:	5.9mm (0.233 in.) nominal
Cable weight:	13 kg/305m (28 lbs./1000 ft.)
Packaging:	305m (1000 ft.) easy-pay-out box Packaged tested to ISTA procedure 1A

KEY FEATURES AND BENEFITS

Third-party tested:	Cable has been tested as part of the TX6 Category 6 U/UTP Copper Cabling System by an independent laboratory and complies with the electrical channel requirements of the following standard: ANSI/TIA-568.2-E Category 6 standard
Descending length cable markings:	Easy identification of remaining cable reduces installation time and cable scrap
Cross divider:	Separates twisted pairs for robust cable performance
Tested beyond the standards:	Cable has been characterized to 350 MHz, 100 MHz above the standard
Easy payout carton:	Ensures proper performance and provides quick installation

APPLICATIONS

TX6 U/UTP Copper Cable is a component of the TX6 U/UTP Copper Cabling System. Interoperable and backward compatible, this end-to-end system provides design flexibility to protect network investments well into the future. With certified performance to the ANSI/TIA-568.2-E Category 6 and ISO 11801 Class E standards, this system will support the following applications:

- Ethernet 10BASE-T, 100BASE-T (Fast Ethernet), 1000BASE-T (Gigabit Ethernet), 10GBASE-T (10 Gigabit Ethernet over limited distances as specified in the industry 10GBASE-T standards)
- 155 Mb/s ATM, 622 Mb/s ATM, 1.2 Gb/s ATM
- Token ring 4/16

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ADDITIONAL SPECIFICATIONS

Mechanical Test	
Ultimate breaking strength:	>400 N (90 lbf)
Minimum bend radius:	4 x cable diameter
Electrical Test	
DC resistance:	<9.38 Ohm per 100m (328 ft.)
DC resistance unbalance:	<5%
Mutual capacitance:	<5.6 nF per 100m (328 ft.)
Capacitance unbalance:	<330 pF per 100m (328 ft.)
Characteristic impedance:	100 Ohm +/-15% up to 100 MHz
Nominal velocity of propagation (NVP):	65% nominal
Operating voltage, maximum:	80 V

ENGINEERING DRAWINGS

