

# TX6™ Category 6 U/UTP Copper Cable

## SPECIFICATIONS

Category 6 U/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 flame retardant PVC (CM) jacket.



## TECHNICAL INFORMATION

<b>Electrical performance:</b>	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
<b>Conductor/insulator:</b>	24 AWG solid copper insulated with HPDE
<b>Insulation diameter:</b>	0.86mm - 1.21mm (0.034 in. - 0.048 in.)
<b>Certification:</b>	ANATEL 02485-09-06246
<b>Flame rating:</b>	UL 1685; EN50575: Euroclass Eca
<b>PoE compliance:</b>	Meets IEEE 802.3af, IEEE 802.3at and IEEE 802.3bt for PoE applications
<b>Installation tension:</b>	110 N (25 lbf) maximum
<b>Temperature rating:</b>	0° to 50°C (32° to 122°F) during installation -20° to 75°C (-4° to 167°F) during operation
<b>Cable jacket:</b>	Flame retardant PVC
<b>Cable diameter:</b>	5.8mm (0.229 in.) nominal
<b>Cable weight:</b>	12 kg/305m (26 lbs./1000 ft.)
<b>Packaging:</b>	305m (1000 ft.) easy-pay-out box Packaged tested to ISTA procedure 1A

## KEY FEATURES AND BENEFITS

<b>Third-party tested:</b>	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
<b>Descending length cable markings:</b>	Easy identification of remaining cable reduces installation time and cable scrap
<b>Cross divider:</b>	Separates twisted pairs for robust cable performance
<b>Tested beyond the standards:</b>	Cable has been characterized to 350 MHz, 100 MHz above the standard
<b>Easy payout box:</b>	Ensures proper performance and provides quick installation

## APPLICATIONS

TX6 U/UTP copper cable is a component of the Panduit 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

### TX6 U/UTP Copper Cabling

**CM:** PUC6C04\*\*FE

\*\*To designate a color, add suffix BU (Blue), WH (White), YL (Yellow), IG (International Gray), BL (Black), RD (Red), GR (Green), OR (Orange), or VL (Violet).

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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

