TX6™ Category 6 UTP Copper Cable

**Specifications**

Category 6 UTP cable shall meet ANSI/TIA-568-C.2 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 jacket.

**Technical Information**

- **Electrical performance:** Certified performance in a 4-connector configuration up to 100 meters, meets ANSI/TIA-568-C.2, ISO 11801 2nd Edition Class E and IEC 61156-5 Category 6 channel and component requirements.
- **Conductor/insulator:** 24 AWG solid copper insulated with HDPE.
- **Certification:** ANATEL 2485-09-6246 for PUC6C04 and PUR6C04.
- **Flame rating:** LSZH – IEC 60332-1, 60754-2, 61034; Euroclass Dca – s2, d2, a1.
- **PoE compliance:** Meets IEEE 802.3af and IEEE 802.3at 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:** PVC (CM) – PVC; PVC (CMR) – Flame retardant PVC.
- **Cable diameter:** 5.9mm (0.233 in.) nominal.
- **Cable weight:** LSZH – 12.5 kg/305m (27 lbs./1000 ft.); PVC (CM) – 12 kg/305m (26 lbs./1000 ft.); PVC (CMR) – 13 kg/305m (28 lbs./1000 ft.).

**Key Features and Benefits**

- **Third party tested:** Cable has been tested as part of the TX6™ Category 6 UTP Copper Cabling System by an independent laboratory and complies with the electrical channel requirements of the following standard: ANSI/TIA-568-C.2 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 box:** Ensures proper performance and provides quick installation.

**Applications**

TX6™ UTP Copper Cable is a component of the Panduit® TX6™ 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-C.2 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.

**Packaging**

- **PVC (CMR) – 15 kg/305m (31 lbs./1000 ft.).**
- **PVC (CM) – 14 kg/305m (29 lbs./1000 ft.).**
- **LSZH – 14.5 kg/305m (30 lbs./1000 ft.).**

**Certification**

- **Flame rating:** LSZH – IEC 60332-1, 60754-2, 61034; Euroclass Dca – s2, d2, a1.
- **Installation tension:** 110N (25 lbf) maximum.
- **PoE compliance:** Meets IEEE 802.3af and IEEE 802.3at for PoE applications.
- **Cable diameter:** 5.9mm (0.233 in.) nominal.
- **Cable weight:** PVC (CMR) – 15 kg/305m (31 lbs./1000 ft.); PVC (CM) – 14 kg/305m (29 lbs./1000 ft.).

**Termination and Cable Prep Tools**

- **Conductor stripping tool:** CJAST.
- **Conductor snipping tool:** EGJT or TGJT.

**Termination and Cable Prep Tools**

- **Conductor stripping tool:** CJAST.
- **Conductor snipping tool:** EGJT or TGJT.

**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.

**www.panduit.com**
TX6™ Category 6 UTP Copper Cable

**additional specifications**

<table>
<thead>
<tr>
<th>Mechanical Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultimate Breaking Strength</td>
<td>&gt;400 N (90 lbf)</td>
</tr>
<tr>
<td>Minimum Bend Radius</td>
<td>4 x cable diameter</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electrical Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Resistance</td>
<td>&lt;9.38 Ohm per 100m (328 ft.)</td>
</tr>
<tr>
<td>DC Resistance Unbalance</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Mutual Capacitance</td>
<td>&lt;5.6 nF per 100m (328 ft.)</td>
</tr>
<tr>
<td>Capacitance Unbalance</td>
<td>&lt;330 pF per 100m (328 ft.)</td>
</tr>
<tr>
<td>Characteristic Impedance</td>
<td>100 Ohm +/- 15% up to 100 MHz</td>
</tr>
<tr>
<td>Nominal Velocity of Propagation (NVP)</td>
<td>65%</td>
</tr>
<tr>
<td>Operating Voltage, Maximum</td>
<td>80V</td>
</tr>
</tbody>
</table>

**cable construction**

![Diagram of TX6™ Category 6 UTP Copper Cable construction](image)

- **Jacket**
- **Conductor Wire**
- **Conductor Insulator**
- **Cross Divider**
- **Rip Cord**

WORLDWIDE SUBSIDIARIES AND SALES OFFICES

PANDUIT US/CANADA
Phone: 800.777.3300

PANDUIT EUROPE LTD.
London, UK
cs-emea@panduit.com
Phone: 44.20.8601.7200

PANDUIT SINGAPORE PTE. LTD.
Republic of Singapore
cs-ap@panduit.com
Phone: 65.6305.7575

PANDUIT JAPAN
Tokyo, Japan
cs-japan@panduit.com
Phone: 81.3.6863.6000

PANDUIT LATIN AMERICA
Guadalajara, Mexico
cs-la@panduit.com
Phone: 52.33.3777.6000

PANDUIT AUSTRALIA PTY. LTD.
Victoria, Australia
cs-aus@panduit.com
Phone: 61.3.9794.9020

For a copy of Panduit product warranties, log on to www.panduit.com/warranty

For more information
Visit us at www.panduit.com
Contact Customer Service by email: cs@panduit.com
or by phone: 800-777-3300