# NetKey® Unshielded Category 6A Copper Cable

PANDUIT®
SPECIFICATION SHEET

## specifications

Category 6A/Class $E_A$ cable shall be constructed of 23 AWG copper conductors with HDPE Low Smoke Zero Halogen (LSZH) insulation. The copper conductors shall be twisted in pairs with each pair individually covered with a metallic foil barrier tape. The foil barrier tape shall not be grounded. All four pairs shall then be covered with a HDPE jacket.



| *NetKey® Unshielded Category 6A Copper Cable* | |
|---|---|
| ***LSZH (60332-1):*** | NUL6X04*-HE+ |
| ***LSZH (Cca):*** | NUY6X04*-HE+ |

* To designate colour, add suffix WH (White) and BU (Blue). For additional cable colours, contact customer service.
+ G for 305m reel; D for 500m reel

## technical information

| | |
|---|---|
| ***Category 6A/Class $E_A$ channel performance:*** | Certified channel performance in a 4-connector configuration up to 100 meters and exceeds the requirements of ISO 11801 Class $E_A$ standards swept up to 500 MHz for supporting 10GBASE-T transmission over twisted-pair cabling systems as part of the Panduit® NetKey® UTP Copper Cabling System. |
| ***Cable diameter:*** | 7.2mm (0.283 in.) nominal |
| ***Conductors/insulators:*** | 23 AWG solid copper insulated with flame retardant HDPE (LSZH) |
| ***Flame rating:*** | LSZH (60332-1): IEC 60332-1, IEC 60754, IEC 61034<br>LSZH (Cca): IEC 60332-1, IEC 60754, IEC 61034,<br>EuroClass Cca-s1a,d1,a1 per EN 13501 |
| ***PoE compliant:*** | Meets IEEE 802.3af, IEEE 802.3at and IEEE 802.3bt for PoE applications |
| ***Installation tension:*** | 110N (25 lbf) maximum |
| ***Temperature rating:*** | 0°C to 50°C (32°F to 122°F) during installation<br>-20°C to 60°C (-4°F to 140°F) during operation |
| ***Cable jacket:*** | HDPE (LSZH) |
| ***Cable weight:*** | 15.0 kg/305m (33.1 lbs./1000 ft.);<br>24.6 kg/500m (54.2 lbs./1640 ft.) |
| ***Packaging:*** | 17.4 kg/305m (38.4 lbs./1000 ft.);<br>27.0 kg/500m (59.5 lbs./1640 ft.)<br>Package tested to ISTA procedure 1A |

## key features and benefits

| | |
|---|---|
| ***Robust cable design*** | Small cable diameter delivers superior PSANEXT and PSAACRF suppression |
| ***Round cable design*** | Improves fill capacity, cable management, reduces required bend radius and allows efficient use of pathways and spaces |
| ***Highest density*** | All testing based on 48-port/1RU panels |
| ***Descending length cable markings*** | Easy identification of remaining cable to reduce installation time and cable scrap |

## applications

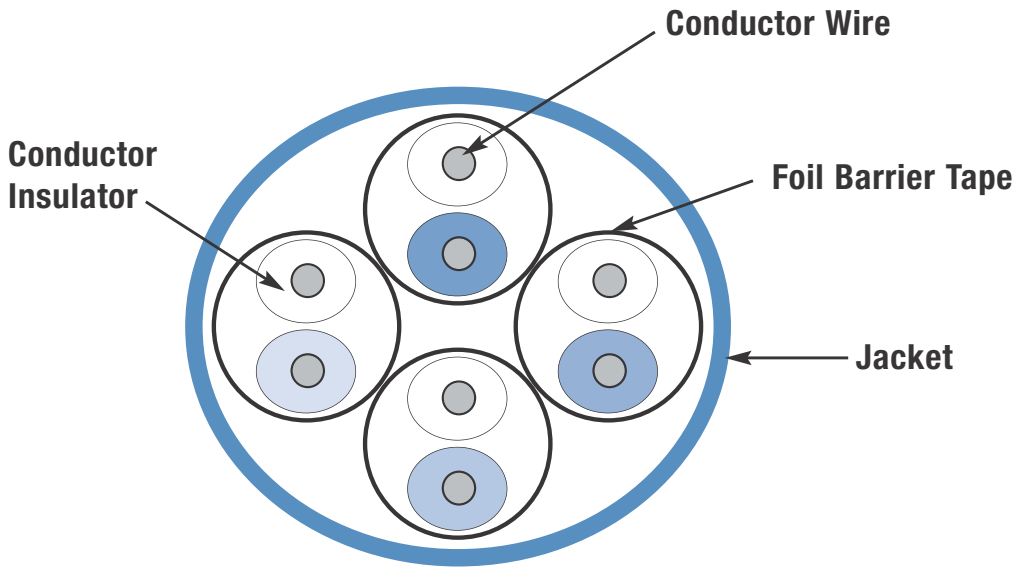
The NetKey® UTP Copper Cable with MaTriX Technology is a component of the TX6A™ Copper Cabling System. Interoperable and backward compatible, this end-to-end system provides design flexibility to protect network investments well into the future.

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** | 4 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** | <330 pF per 328 ft. (100m) at 1 kHz |
| **Characteristic Impedance** | 100 Ohm +/-15% up to 100 MHz |
| **Nominal Velocity of Propagation (NVP)** | Panduit 76% |
| **Operating Voltage, Maximum** | 80V |

## cable construction




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

**For more information**

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