

NetKey® U/UTP Unshielded Category 6A Copper Cable

Latin America,
Europe and
Asia Pacific

PANDUIT™
SPECIFICATION SHEET

SPECIFICATIONS

Category 6A/Class E_A cable shall be constructed of 23 AWG copper conductors with HDPE insulation. The copper conductors shall be twisted in pairs with an overall AXT barrier tape. The AXT barrier tape shall not be grounded. All four pairs shall then be covered with an HDPE (LSZH) jacket.



NetKey Category 6A U/UTP Copper Cable

LSZH:

NUL6X04**-VEG

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

TECHNICAL INFORMATION

Category 6A/Class E_A channel and component performance:	Certified channel performance in a 4-conductor configuration up to 100m and meets the requirements of ISO 11801 Class E _A and ANSI/TIA-568.2-E Category 6A standards for supporting 10GBASE-T transmission over twisted pair cabling systems as a part of the NetKey Category 6A U/UTP Copper Cabling System
Cable diameter:	6.7mm (0.264 in.) nominal
Insulation diameter:	0.97mm - 1.05mm (0.038 in. - 0.041 in.)
Conductors/insulators:	23 AWG solid copper insulated with HDPE
Certification:	ANATEL 02511-12-06246
Flame rating:	IEC 60332-1, IEC 60332-3-22, IEC 60754, IEC 61034 EN 50399: EuroClass Dca-s2,d2,a1
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 -20°C to 75°C (-4°F to 167°F) during operation
Cable jacket:	HDPE (LSZH)
Cable weight:	15 kg/500m (33 lbs./1640 ft.)
Packaging:	305m (1000 ft.) on a reel Packaged 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/1 RU panels
Descending length cable markings:	Easy identification of remaining cable to reduce installation time and cable scrap

APPLICATIONS

The NetKey U/UTP Copper Cable 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

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ADDITIONAL SPECIFICATIONS

Mechanical Test	
Ultimate breaking strength:	> 90 lbf (400 N)
Minimum bend radius:	8 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):	67% nominal
Operating voltage, maximum:	80 V

ENGINEERING DRAWING

