# NetKey® Unshielded Category 6A Copper Cable

Latin America, Europe and Asia Pacific



#### **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 and separated by a cross divider with an overall AXT barrier tape. The AXT barrier tape shall not be grounded. All four pairs are surrounded by a PVC flame-retardant jacket.



## NetKey Category 6A U/UTP Copper Cable

LSZH:

NUL6X04\*\*-FEG

\*\*Colors: 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 <sub>A</sub> channel performance:	Certified channel performance in a 4-connector configuration up to 100 meters and exceeds the requirements of ISO 11801 Class $E_{\rm A}$ standards swept up to 500 MHz for supporting 10GBASE-T transmission over twisted-pair cabling systems as part of the NetKey U/UTP Copper Cabling System.	
Cable diameter:	6.8mm (0.271 in.) nominal	
Insulation diameter:	1.05-1.13mm (0.041-0.044 in.)	
Conductors/insulators:	23 AWG solid copper insulated with HDPE	
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:	14 kg/500m (31 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/1RU panels	
Descending length:	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:

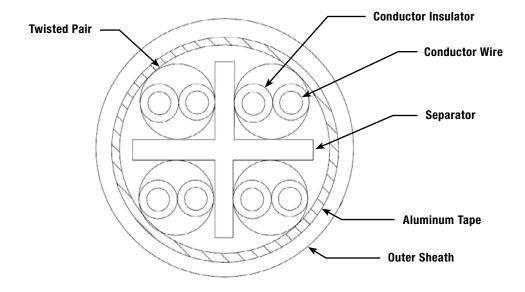
- 10GBASE-T Ethernet
- Data center I/O consolidation
- Data center server virtualization
- · Consolidation of network interconnects
- Back-bone aggregation
- Parallel processing and high speed computing

### **NetKey® Unshielded Category 6A Copper Cable**

#### **ADDITIONAL SPECIFICATIONS**

	Mechanical Test
Ultimate Breaking Strength	>400 N (90 lbf)
Minimum Bend Radius	8 x Cable Diameter
	Engineering 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
Characterisitic Impedance	100 Ohm +/-15% up to 100 MHz
Nominal Velocity of Propagation (NVP) 63% nominal	
Operating Voltage, Maximum	80 V

#### **ENGINEERING DRAWING**



#### **WORLDWIDE SUBSIDIARIES AND SALES OFFICES**

PANDUIT US/CANADA Phone: 800.777.3300 PANDUIT EUROPE LTD. London, UK Phone: 44.20.8601.7200 PANDUIT SINGAPORE PTE. LTD. PANDUIT JAPAN Republic of Singapore Phone: 65.6305.7575

Tokyo, Japan Phone: 81.3.6863.6000 PANDUIT LATIN AMERICA Guadalajara, Mexico Phone: 52.33.3777.6000

PANDUIT AUSTRALIA PTY. LTD. Victoria, Australia Phone: 61.3.9794.9020

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

