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



### specifications

NetKey $^{\circ}$  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 and separated by a cross-divider. All four pairs shall be surrounded by an alien crosstalk barrier tape and a flame retardant jacket.



### technical information

Category 6A/Class E <sub>A</sub> channel performance:	Certified channel performance in a 4-connector configuration up to 100 meters and meets the requirements of ANSI/TIA-568-C.2 Category 6A and ISO 11801 Class E <sub>A</sub> standards for supporting 10GBASE-T transmission over twisted-pair cabling systems as a part of the NetKey* Category 6A UTP Copper Cabling System	
Cable diameter:	7.4mm (0.290 in.) nominal	
Conductors/insulators:	23 AWG solid copper insulated with HDPE (LSZH)	
Flame rating:	HDPE (LSZH-1): IEC 60332-1, 60754-2, 61034-2, EN 50575: Euroclass Dca - s2, d2, a1	
PoE compliant:	Meets IEEE 802.3af and IEEE 802.3at for PoE applications	
Segregation classification:	Meets EN 50174-2:2009 segregation classification C	
Certification:	ANATEL 2511-12-6246	
Installation tension:	25 lbf (110 N) maximum	
Temperature rating:	0°C to 60°C (32°F to 140°F) during installation -20°C to 75°C (-4°F to 167°F) during operation	
Cable jacket:	HDPE (LSZH): Low smoke flame retardant PVC	
Cable weight:	18.5 kg/305m (40.8 lbs./1000 ft.)	
Packaging:	1000 ft. (305m) on a reel 20.2 kg/305m (46.8 lbs./1000 ft.) Package tested to ISTA procedure 1A	

## key features and benefits

Round cable design	Improves fill capacity, cable management, reduces required bend radius and allows efficient use of pathways and spaces
Extended temperature range	Allows operation in 75°C (167°F) ambient environment providing error-free performance in high-density installations and large bundles running PoE+ or PoE++ applications
Descending length cable markings	Easy identification of remaining cable to reduce installation time and cable scrap

## applications

The NetKey\* Category 6A UTP Copper Cabling System provides a cost effective medium for ensuring that network bandwidth needs are easily met today and tomorrow. The NetKey\* Solution helps organizations efficiently and reliably meet data transmission needs. With certified performance to ISO 11801 Class EA, IEEE 802.3af and IEEE 802.3at, and ANSI/TIA-586-C.2 Category 6A standards, this system will support high bandwidth applications such as those required in the education, healthcare, finance, and banking sectors.

# NetKey® Category 6A UTP Copper Cable

LSZH (60332-1): NUL6X04\*-CEG

#### NetKey® Category 6A UTP Jack Module

Jack module: Bulk pack of NK6X88M\*\*

**25 jacks:** N

NK6X88M\*\*-Q

### NetKey® Category 6A UTP Patch Cords

**Meter lengths:** NK6APC^^M

#### Cable Prep Tools

Wire

snipping tool: Wire

CWST

stripping tool: Cable bundle CJAST

organizing tool: CBOT24K

\*To designate color, add suffix BU (Blue), WH (White), IG (International Gray). For additional cable colors, please contact customer service.

\*\*To designate color, add suffix IW (Off White), EI (Electric Ivory), AW (Arctic White), BL (Black), OR (Orange), RD (Red), BU (Blue), GR (Green), YL (Yellow), or VL (Violet) to end of the part number.

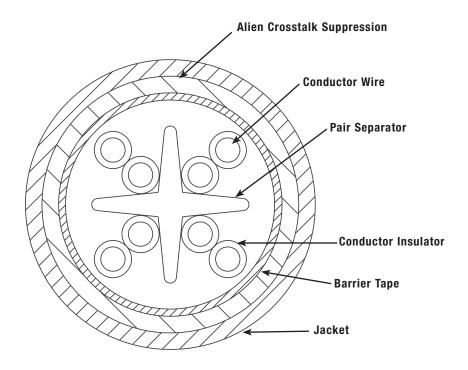
^Add length, then color to end of part number: 1-5M, 7M, 10M,12M, 15M. Color is off white unless color code is added to end: BL (Black), BU (Blue), GR (Green), GY (Gray), RD (Red), YL (Yellow). Example: Blue, 5-meter patch cord is NK6APC5MBU.

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

## 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 67%			
Operating Voltage, Maximum	80V			

### cable construction



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

PANDUIT 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