

NetKey® Category 6A Copper Cable

PANDUIT®

SPECIFICATION SHEET

specifications

NetKey® 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_A 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 _A 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.

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LSZH (60332-1): NUL6X04*-CEG

NetKey® Category 6A UTP Jack Module

Jack module: NK6X88M**

Bulk pack of 25 jacks: NK6X88M**-Q

NetKey® Category 6A UTP Patch Cords

Meter lengths: NK6APC^^M

Cable Prep Tools

Wire

snipping tool: CWST

Wire

stripping tool: CJUST

Cable bundle

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.

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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

