

# Category 6A UTP Copper Cable

# PANDUIT®

SPECIFICATION SHEET

## specifications

Category 6A/Class EA cable shall be constructed of 23 AWG copper conductors with FEP Plenum (CMP) insulation. The copper conductors shall be twisted in pairs and separated by a cross-divider. All four pairs shall be surrounded by a non-conductive foil tape and a flame retardant jacket. The foil tape shall suppress the effects of alien crosstalk.



## technical information

<b>Electrical performance:</b>	Certified component and channel performance in a 4-connector configuration up to 100 meters and meets/exceeds the requirements of ISO 11801 Class E <sub>A</sub> and ANSI/TIA-568-C.2 Category 6A standards for swept frequencies up to 500 MHz
<b>Cable diameter:</b>	FEP Plenum (CMP): 0.250 in. (6.4mm) nominal
<b>Standards compliance:</b>	UL Listed CMP-LP (0.6A) or better
<b>Conductors/insulators:</b>	23 AWG solid copper insulated with FEP (CMP), flame retardant PE
<b>Flame rating:</b>	FEP plenum (CMP): NFPA 262
<b>PoE compliance:</b>	Meets IEEE 802.3af, IEEE 802.3at and IEEE 802.3bt for PoE applications
<b>Installation tension:</b>	110 N (25 lbf) maximum
<b>Temperature rating:</b>	32°F to 140°F (0°C to 60°C) during installation -4°F to 194°F (-20°C to 90°C) during operation
<b>Cable jacket:</b>	FEP plenum (CMP): flame retardant PVC
<b>Cable weight:</b>	31.2 lbs./1000 ft. (14.2 kg/305m)
<b>Packaging:</b>	33.4 lbs./1000 ft. (15.2 kg/305m) Packaged tested to ISTA Procedure 1A

## key features and benefits

<b>Interoperable</b>	Compatible with components of the TX6A-SD™ 10Gig™ UTP Copper Cabling System with MaTriX Technology (70 meter solution) for increased design flexibility
<b>Headroom warranty</b>	Provides margin above the industry standard for both electrical and alien crosstalk performance
<b>Round cable design</b>	Improves fill capacity, cable management, reduces required bend radius and allows efficient use of pathways and spaces
<b>Extended temperature range</b>	Allows operation in 90°C (194°F) ambient environment providing error-free performance in high-density cabinets and large cable bundles running PoE+ or PoE++ applications
<b>Highest density</b>	All testing and headroom based on 48-port/1RU panels
<b>Descending length cable markings</b>	Easy identification of remaining cable to reduce installation time and cable scrap

## applications

Category 6A UTP Copper Cable is a component of the TX6A™ 10Gig™ UTP Copper Cabling System when installed according to the above length considerations. Interoperable and backwards compatible, this end-to-end system provides design flexibility to protect network investments well into the future.

With certified performance to the ISO 11801 Class E<sub>A</sub> and ANSI/TIA-568-C.2 Category 6A standards. Usage of the TX6A™ 10Gig™ UTP Copper Cabling System includes:

- Ethernet 10GBASE-T

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### TX6A™ 10Gig™ UTP Copper Cabling System

#### Category 6A UTP Copper Cable

**Plenum:** PUP6AS04\*-G

#### TX6A™ 10Gig™ UTP Jack Module

**Jack module:** CJ6X88TG\*\*  
**Shuttered jack module:** CJH6X88TG\*\*  
**Right angle jack module:** CJR6X88TG\*\*

#### TX6A™ 10Gig™ UTP Patch Cords

**CM (meter lengths):** UTP6A^M  
**CM (foot lengths):** UTP6A^^

#### TX6A-SD™ 10Gig™ UTP Patch Cords

**CM (foot lengths):** UTP6ASD^BU  
**CM (meter lengths):** UTP6ASD^^MBU

#### Mini-Com® Angled Modular Patch Panels

**24-port, 1 RU:** CPPA24FMWBLY  
**48-port, 2 RU:** CPPA48FMWBLY  
**72-port, 2 RU:** CPPLA72WBLY

#### Mini-Com® Flat Modular Patch Panels

**24-port, 1 RU:** CPP24FMWBLY  
**48-port, 1 RU:** CPP48HDWBLY  
**48-port, 2 RU:** CPP48FMWBLY  
**72-port, 2 RU:** CP72FMWBLY

#### Cable Prep Tools

**Wire snipping tool:** CWST  
**Wire stripping tool:** CCAST

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

\*\*To designate color, add suffix IW (Off White), EI (Electric Ivory), IG (International Gray), WH (White), AW (Arctic White), BL (Black), BL (Blue), RD (Red), YL (Yellow), GR (Green), OR (Orange), or VL (Violet).

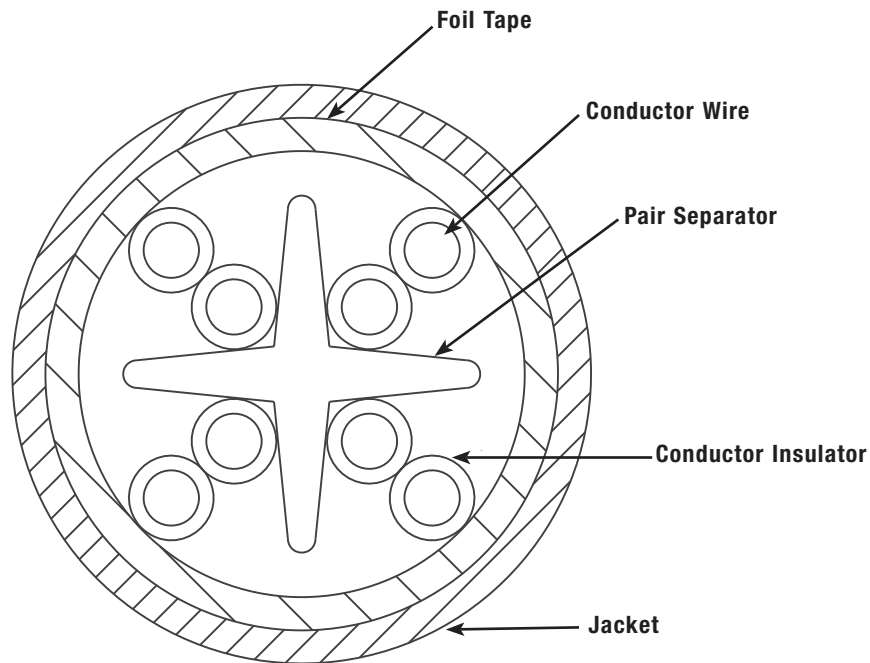
^For lengths 3 to 20 feet (increments of one foot) and 25, 30, 35, 40 feet, change the length designation in the part number to desired length. For standard cable colors other than IG (International Gray) substitute IG suffix with BL (Black), BU (Blue), GR (Green), RD (Red), YL (Yellow), OR (Orange), or VL (Violet) to the end of the part number. For example, the part number for a Blue, 15-foot patch cord is UTP6A15BU.

^^For lengths 1 to 10 meters (increments of one meter) and 1.5, 2.5, 15, 20 meters, change the length designation in the part number to desired length. For standard cable colors other than IG (International Gray) substitute IG suffix with BL (Black), BU (Blue), GR (Green), RD (Red), YL (Yellow), OR (Orange), or VL (Violet) to the end of the part number. For example, the part number for a Blue, 15-meter patch cord is UTP6A15MBU.

# Category 6A UTP Copper Cable

Mechanical Test	
Ultimate Breaking Strength	>400 N (90 lbf)
Minimum Bend Radius	4 x cable diameter
Electrical Test	
DC Resistance	<9.38 ohm per 100m (328 ft.)
DC Resistance Unbalance	<5%
Mutual Capacitance	<5.6 nF per 100m (328 ft.) at 1 KHz
Capacitance Unbalance	<330 pF per 100m (328 ft.) at 1 kHz
Characteristic Impedance	100 Ohm +/-15% up to 100 MHz
Nominal Velocity of Propagation (NVP)	67%

## cable construction



### WORLDWIDE SUBSIDIARIES AND SALES OFFICES

PANDUIT US/CANADA  
Phone: 800.777.3300

PANDUIT EUROPE LTD.  
London, UK  
cs-emea@panduit.com  
Phone: 44.20.8601.7200

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Republic of Singapore  
cs-ap@panduit.com  
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Tokyo, Japan  
cs-japan@panduit.com  
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COSP415--WW-ENG  
12/2017