IndustrialNet™ Unshielded Category 6A U/UTP Copper Cable

North America and Latin America

PANDUIT®
SPECIFICATION SHEET

SPECIFICATIONS

Category 6A 4-pair U/UTP copper cable shall meet or exceed the ANSI/TIA-568.2-D Category 6A and ODVA EtherNet/IP^ standards. The solid copper conductors shall be 23 AWG with high density polyethylene (HDPE) insulation. The copper conductors shall be twisted in pairs and wrapped with a foam polypropylene tape to form a core. All pairs shall then be covered with a discontinuous foil shield and an industrially rated PVC jacket which shall be oil and sunlight resistant and flame retardant to CMX/CMR for industrial Ethernet applications. This cable shall be rated for panel or on-machine applications where space is shared with 600V high voltage cables.

IndustrialNet Unshielded Category 6A U/UTP Copper Cable	
CMX/CMR:	IURH6X04**-UG

**Colors: BL (Black) or TL (Teal)

TECHNICAL INFORMATION

Category 6A component/ channel performance up to 100 meters:	Meets or exceeds the requirements of ANSI/TIA-568.2-D Category 6A at swept frequencies up to 500 MHz
Electrical performance:	Conforms to ODVA EtherNet/IP^ performance requirements
Standard compliances:	UL AWM Style 21695 (80°C 600V), Oil Res and Sun Res, UL 444 Sun Res, UL 1666 CMR
RoHS compliance:	Compliant (EU DIRECTIVE 2011/65/EU)
Conductors/insulators:	Four pairs of 23 AWG solid copper insulated with high density polyethylene (HDPE) insulation
Insulation diameter:	1.12mm – 1.27mm (0.044 in. – 0.050 in.)
Flame rating:	CMX/CMR
Installation tension:	110 N (25 lbf.) maximum
Temperature rating:	-4°F to 176°F (-20°C to 80°C) during transport, installation -40°F to 176°F (-40°C to 80°C) operation temperature
Cable jacket:	Oil and sunlight resistant PVC
Cable diameter:	8.1mm (0.319 in.) nominal
Cable weight:	20 kg/305m (43 lbs./1000 ft.)
Packaging:	305m (1000 ft.) on a reel Package tested to ISTA Procedure 1A

KEY FEATURES AND BENEFITS

Oil and sunlight performance rated cable jacket:	Delivers enhanced chemical resistance and mechanical performance
EtherNet/IP compliant design:	Provides performance levels required to support industrial network applications
600V AWM rated jacket:	Approved for control panel or on-machine applications when the space is shared with 600V high voltage power cables, required for UL 508A

APPLICATIONS

IndustrialNet Category 6A U/UTP Copper Cable provides reliability and high performance as an integral component of the end-to-end solution for industrial Ethernet based communications networks. The cable with oil and UV resistant PVC jacket withstands harsh industrial conditions such as oil rigs and other hazardous environments. Rated for panel or on-machine applications when the space is shared with 600V high voltage power cables, IndustrialNet Category 6A U/UTP Copper Cable is ideal for control panel deployments featuring power source voltages. Cable is suitable for transmission of high performance 10BASE-T, 100BASE-T and 1000BASE-T uplinks featuring up to gigabit data transmission from the control panel to the consolidation point.
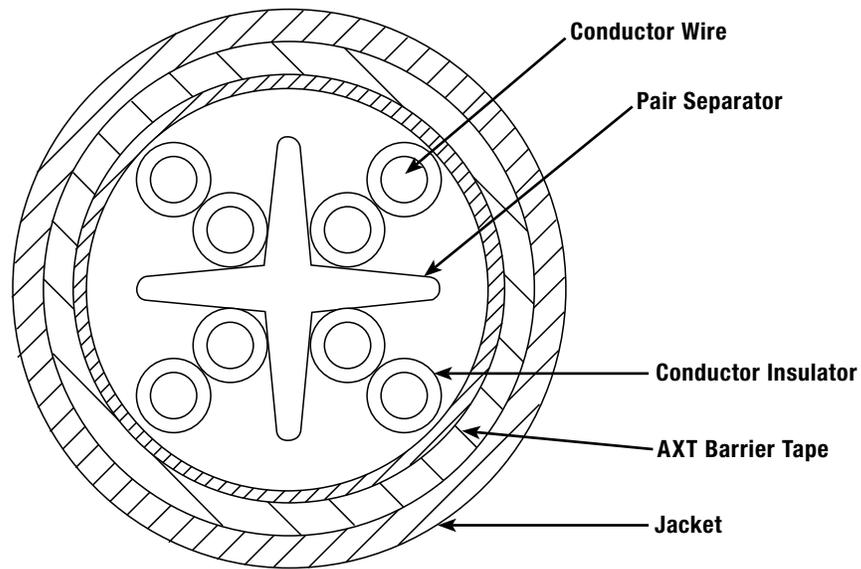
TAA Compliant

All listed part numbers are compliant with the U.S. Trade Agreements Act (TAA) for purchases shipped to customers in the United States.

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ADDITIONAL SPECIFICATIONS

Mechanical Test	
Ultimate breaking strength:	> 400 N (90 lbf)
Minimum bend radius:	8 x cable diameter

Engineering Test	
Nominal velocity of propagation (NVP):	66% nominal
Operating voltage, maximum:	80 V

ENGINEERING DRAWING

Conductor Wire

Pair Separator

Conductor Insulator

AXT Barrier Tape

Jacket

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

For more information
Visit us at www.panduit.com
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