# **IndustrialNet™ Category 5e** Solid Conductor UTP Copper Cable



### specifications

Category 5e 4-pair UTP copper cable shall meet or exceed the ANSI/TIA-568-C.2 Category 5e and ODVA EtherNet/IP standards. The cable shall be power limited tray cable (PLTC). The solid copper conductors shall be 22 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 an industrially rated black PVC jacket which shall be oil and sunlight resistant and flame retardant to CMX Outdoor/CMR for industrial Ethernet applications. This cable shall be rated for panel or on-machine applications where space is shared with 600 V high voltage cables.



#### technical information

Category 5e component performance up to 100 meters:	Exceeds the requirements of ANSI/TIA-568-C.2 Category 5e and ODVA EtherNet/IP standards at swept frequencies up to 100 MHz	
Electrical performance:	Meets all ODVA EtherNet/IP performance requirements	
Standard compliances:	UL AWM Style 2570 (80°C 600 V), UL 13 PLTC, 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 22 AWG solid copper insulated with high density polyethylene (HDPE) insulation	
Insulation diameter:	1.07 – 1.32mm (0.042 – 0.052 in.)	
Flame rating:	CMX Outdoor/CMR	
Installation tension:	110 N (25 lbf) maximum	
Temperature rating:	-20°C to 75°C (-4°F to 167°F) during transport, installation and operation	
Cable jacket:	Oil and sunlight resistant PVC	
Cable diameter:	7.9mm (0.311 in.)	
Cable weight:	14 kg/305m (38 lbs./1000 ft.)	
Packaging:	Packaged 305 meters (1000 feet) on a reel Package tested to ISTA Procedure 1A	

### key features and benefits

Third party tested	Provides confidence that the cable delivers Category 5e performance for the 100 meter channel	
Power Limited Tray Cable (PLTC) approved	Can be used for Class 1 Div 2 hazardous location applications	
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	
600 V rated jacket	Approved for control panel or on-machine applications when the space is shared with 600 V high voltage power cables, required for UL 508A	

## applications

IndustrialNet™ Category 5e Solid Conductor 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 PLTC compliant cable with oil and UV resistant PVC jacket withstands harsh industrial conditions such as oil rigs and other hazardous Class 1 Div 2 environments. Rated for panel or on-machine applications when the space is shared with

600 V high voltage power cables, IndustrialNet™ Category 5e Solid Conductor UTP Copper Cable is ideal for control panel deployments featuring power source voltages. Category 5e rated 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.

#### www.panduit.com/ia

IndustrialNet<sup>™</sup> Category 5e **UTP Copper Cable** 

CMX Outdoor/ CMR 4-pair:

**IURHT5C04BL-UG** 

Category 6A RJ45 Field Terminable Plug

Field terminable

pluq:

FPS6X88MTG

IndustrialNet™ M12X-Code Field Terminable Plug

Field terminable

ISPS6A88MFA plug:

IndustrialNet ™ Category 5e Shielded 600 V Rated Patch Cords

CM/CMX:

ISTPHCH1MTL\*

IndustrialNet™ M12 D-Code to RJ45 Panel Mount Adapter

Panel mount

adapter:

ICAM12DRJS

IndustrialNet™ **DIN Rail Mount** Patch Panel

8-port:

CDPP8RG Mini-Com® DIN Rail Mount Adapter

1-port: CADIN1IG

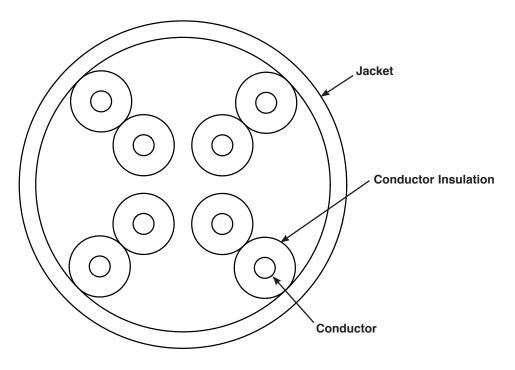
\*For other lengths, change the length designation (1M) of the part number to the desired length (0.3M, 0.6M, 2M, 3M, 5M, or 10M); to designate color, replace TL (Teal) suffix with BL (Black), RD (Red), or YL (Yellow). For example, the part number for a 2-meter teal patch cord is ISTPHCH2MTL.

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## additional specifications

Mechanical Test			
Maximum Pulling Force	178 N (40 lbf.)		
Minimum Bend Radius	31mm (1.2 in.)		
Electrical Test			
Nominal Velocity of Propagation (NVP)	70%		
Operating Voltage, Maximum	80 V		

#### **IURHT5C04BL Cable Cross-Section**



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