# IndustrialNet™ Category 6 F/UTP Copper Cable



#### specifications

Category 6 F/UTP copper cable shall meet or exceed the IEC 61156-6 and ANSI/TIA-568-C.2 Category 6 standards up to 60 meters. The stranded copper conductors shall be 26/7 AWG with high density polyethylene (HDPE) insulation. The copper conductors shall be twisted in pairs. All pairs shall be separated by a divider and then be surrounded by an overall metallic foil and a PVC jacket. The jacket shall be oil, UV, and abrasion resistant for enhanced chemical resistance and mechanical performance. The jacket shall be flame retardant (CM) for industrial Ethernet applications.





#### technical information

Electrical performance:	Certified component performance up to 60 meters and exceeds the requirements IEC 61156-6 Category 6 and ANSI/TIA-568-C.2 Category 6 at swept frequencies up to 250 MHz	
Standard compliances:	SUN RES OIL RES II (UL1581 Section 480 and 1200)	
Conductors/insulators:	Four pairs of 26/7 AWG stranded copper insulated with high density polyethylene (HDPE) insulation	
Insulation diameter:	0.83 – 0.93mm (0.033 – 0.037 in.)	
Flame rating:	CM (UL1685)	
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:	Flame retardant PVC, oil, UV, and abrasion resistant	
Cable diameter:	6.9mm (0.272 in.) nominal	
Cable weight:	23 kg/305m (51 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	Cable has been tested by an independent laboratory and complies with the electrical standard requirements of IEC 61156-6 and ANSI/TIA-568-C.2 Category 6 standards
Reliability	Shielded F/UTP cable construction protects against environmental elements that can cause electrical performance failures; stranded conductors for standard flex applications and ease of installation; cable jacket shall be oil, UV, and abrasion resistant for enhanced chemical resistance and mechanical performance
Descending length cable markings	Easy identification of remaining cable reduces installation time and cable scrap
Packaged on a reel	Ensures proper performance and provides quick installation

## applications

IndustrialNet™ Category 6 F/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 4-pair high performance cable ensures highest availability in conditions seen in industrial environments. The cable incorporates a durable PVC jacket and is oil, UV, and abrasion resistant.

Key applications include:

- 10BASE-T (Ethernet)
- 100BASE-T (Fast Ethernet)
- 1000BASE-T (Gigabit Ethernet)
- Industrial Ethernet
- Downlinks from control panel to the machine area
- Uplinks featuring gigabit data transmission from the control panel to the consolidation point

IndustrialNet <sup>™</sup> Category 6 F/UTP Copper Cable

CM 4-pair/ color Black:

IFC6C04BBL-CEG

IndustrialNet <sup>™</sup> Category 6/5e RJ45 Field Terminable Plug

**Field** 

terminable plug: ISPS688FAS

IndustrialNet <sup>™</sup> Category 5e Shielded 600 V-Rated Patch Cords

CM/CMX: \*ISTPHCH1MTL

IndustrialNet ™ M12 D-Code to RJ45 Panel Mount Adapter

Panel

mount adapter: ICAM12DRJS

Mini-Com® Modular Patch Panel

**8-port:** CDPP8RG **DIN Rail Adapter** 

1-port: CADIN1IW\*\*

\*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.

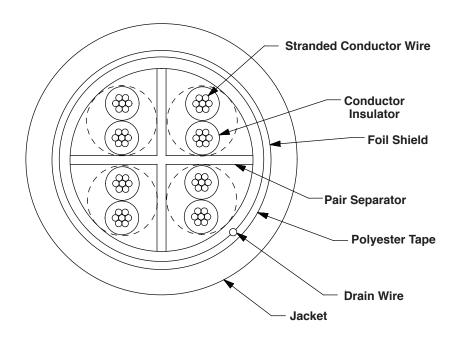
\*\*For standard colors other than Off White, replace IW in part number with BL (Black), El (Electric Ivory), IG (International Gray), or WH (White).

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### additional specifications

Mechanical Test			
Ultimate Breaking Strength	>400 N (90 lbf.)		
Minimum Bend Radius	8x cable diameter		
Electrical Test			
Nominal Velocity of Propagation (NVP)	65%		
Operating Voltage, Maximum	80V		

#### cable construction



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