

# IndustrialNet™ Category 6 S/FTP Copper Cable

## specifications

Category 6 S/FTP copper cable shall meet or exceed the IEC 61156-6 and ANSI/TIA-568-C.2 Category 6 standards up to 80 meters. The stranded copper conductors shall be 24/7 AWG with foamed polyethylene (PE) insulation. The copper conductors shall be twisted in pairs. Each of the four pairs shall be surrounded by an overall braided shield and covered with a polyurethane (PUR) jacket. The jacket shall be oil, ozone, and abrasion resistant for enhanced chemical resistance and mechanical performance. The jacket shall be flame retardant and halogen-free for industrial Ethernet applications. The cable shall support high flex and torsion applications.



## technical information

<b>Electrical performance:</b>	Certified component performance up to 80 meters and exceeds the requirements IEC 61156-6 and ANSI/TIA-568-C.2 Category 6 at swept frequencies up to 250 MHz
<b>Standard compliances:</b>	Flexure IEC 61935-2 Flex Life Test: 1 million cycles at 10x cable diameter; 10 million cycles at 20x cable diameter Torsion Life Test: 3 million cycles, 360° Ozone resistance VDE 0805 Oil resistance EN 60811-2-1 (7 days x 24hrs/90°C)
<b>Conductors/insulators:</b>	Four pairs of 24/7 AWG stranded copper insulated with foamed polyethylene
<b>Insulation diameter:</b>	1.38 – 1.48mm (0.054 – 0.058 in.)
<b>Flame rating:</b>	Flame retardant, halogen-free – IEC 60332-1-2, IEC 60754-1; EN50575: Euroclass Eca
<b>Installation tension:</b>	80 N (18 lbf) maximum
<b>Temperature rating:</b>	-40°C to 80°C (-40°F to 167°F) during transport, installation, and operation
<b>Cable jacket:</b>	Polyurethane (PUR), oil, ozone, and abrasion resistant
<b>Cable diameter:</b>	8.0mm (0.315 in.) nominal
<b>Cable weight:</b>	30 kg/500m (66 lbs./1640 ft.)
<b>Packaging:</b>	Packaged 500 meters (1640 feet) on a reel Package tested to ISTA Procedure 1A

## key features and benefits

<b>Third party tested</b>	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
<b>Reliability</b>	Shielded S/FTP 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, ozone, and abrasion resistant for enhanced chemical resistance and mechanical performance
<b>Descending length cable markings</b>	Easy identification of remaining cable reduces installation time and cable scrap
<b>Packaged on a reel</b>	Ensures proper performance and provides quick installation

## applications

IndustrialNet™ Category 6 S/FTP Copper Cable provides reliability and high performance as an integral component of the end-to-end solution for industrial Ethernet and Ethernet/IP based communications networks. The 4-pair high performance cable ensures highest availability in conditions seen in industrial environments. The cable incorporates a durable PUR jacket for use in installations requiring cable with a halogen-free rating.

Key applications include:

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

### IndustrialNet™ Category 6 S/FTP Copper Cable

**Flame retardant, halogen-free**

**4-pair:** ISX6004AYL-LED

### Category 6A RJ45 Field Terminable Plug

**Field terminable plug:**

FPS6X88MTG

### 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

### Mini-Com® Modular Patch Panel

**8-port, unshielded:** CDPP8RG

**8-port, shielded:** CDPP8RG-S

### DIN Rail Adapter

**1-port:** CADIN1IG\*\*\*

**1-port, shielded:** CADIN1IG-S\*\*\*

\*\*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.

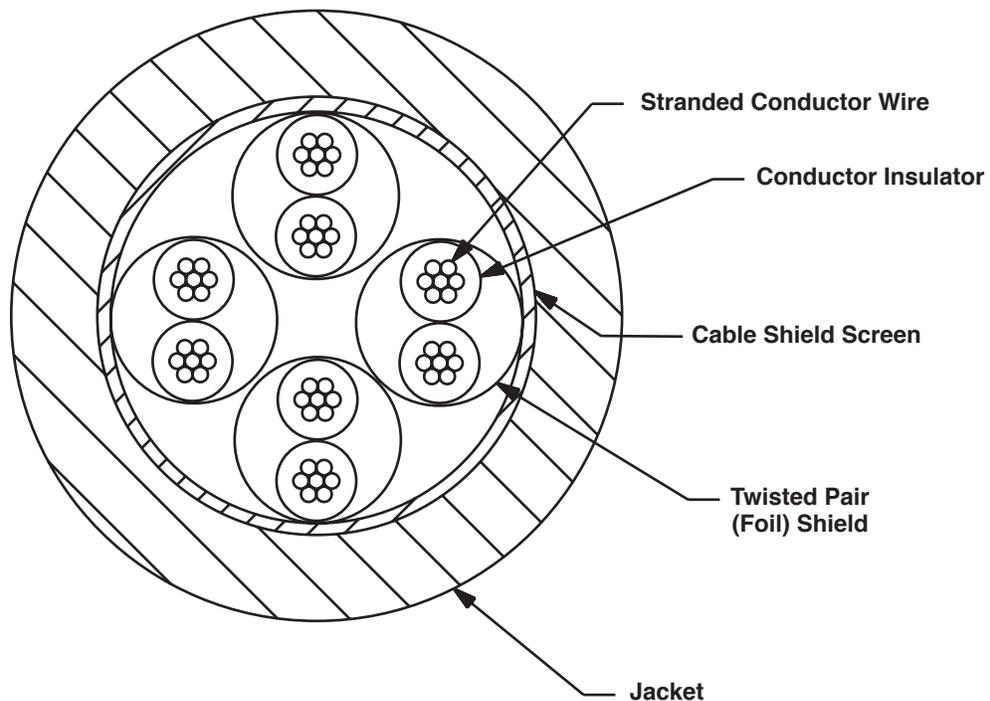
\*\*\*For standard colors other than International Gray, replace IG in part number with BL (Black).

# IndustrialNet™ Category 6 S/FTP Copper Cable

## additional specifications

Mechanical Test	
Ultimate Breaking Strength	>400 N (90 lbf)
Minimum Bend Radius	8x cable diameter
Electrical Test	
Nominal Velocity of Propagation (NVP)	74%
Operating Voltage, maximum	80 V

## cable construction



### WORLDWIDE SUBSIDIARIES AND SALES OFFICES

PANDUIT US/CANADA  
Phone: 800.777.3300

PANDUIT EUROPE LTD.  
London, UK  
Phone: 44.20.8601.7200

PANDUIT SINGAPORE PTE. LTD.  
Republic of Singapore  
Phone: 65.6305.7575

PANDUIT JAPAN  
Tokyo, Japan  
Phone: 81.3.6863.6000

PANDUIT LATIN AMERICA  
Guadalajara, Mexico  
Phone: 52.33.3777.6000

PANDUIT AUSTRALIA PTY. LTD.  
Victoria, Australia  
Phone: 61.3.9794.9020

For a copy of Panduit product warranties, log on to [www.panduit.com/warranty](http://www.panduit.com/warranty)

**PANDUIT**®

For more information  
Visit us at [www.panduit.com](http://www.panduit.com)  
Contact Customer Service by email: [cs@panduit.com](mailto:cs@panduit.com)  
or by phone: 800.777.3300

© 2021 Panduit Corp.  
ALL RIGHTS RESERVED.  
Printed in the U.S.A.  
COSP342--WW-ENG  
4/2021