IndustrialNet™ Category 6A RJ45 Plug with Variant 5 Housing

specifications

The RJ45 industrial Ethernet plug shall meet/exceed the ANSI/TIA-568-C.2 standard for Category 6A performance requirements. The plug housing shall conform to IEC 61076-3-106, Variant 5. The plug shall consist of 8 pins and 8 contacts and terminate 4-pair, 26-22 AWG, 100 ohms, solid or stranded conductor, shielded or unshielded, twisted pair cable. The cable shall have a maximum conductor insulation diameter of 0.063 in. (1.60mm) and jacket diameter ranging between 0.197 in. to 0.394 in. (5.0-10.0mm). Connections to the protective cap and the associated jack/receptacle shall be rated to IP65/IP67 requirements, suitable for indoor and light outdoor deployments.

technical information

Category 6A/Class E_A channel and component performance:	Exceeds channel requirements of ANSI/TIA-568-C.2 Category 6A and ISO11801 Class E_A standards at swept frequencies: 1 to 500 MHz
IEC compliance:	Plug meets IEC 60603-7; housing meets IEC 61076-3-106 Variant 5
Environmental protection:	Industrial bulkhead connection protects and seals connections against dust and water immersion to ANSI/IEC 60529-2004; Vibration, temperature and chemical resistant; shielded version further enhances electromagnetic performance
FCC and ANSI/TIA compliance:	Meets ANSI/TIA-1096-A; contacts plated with 50 microinches of gold for superior performance
IP compliance:	Bulkhead connection rated IP65 / IP67 for dust protection and temporary liquid immersion
RoHS compliancy status:	Compliant
PoE compliancy:	Meets IEEE 802.3af and IEEE 802.3at for PoE applications
Materials:	Plug housing, protective cap constructed of powder coated aluminum die cast
Temperature rating:	-40°F to 158°F (-40°C to 70°C) during operation
Conductor termination range:	26-22 AWG solid or stranded conductor
Conductor insulation diameter:	0.063 in (1.60mm)
Number of mating cycles:	750 connections and disconnections

key features and benefits

IP rated connection:	Withstands harsh factory environments without loss of performance in light wash down and temporary submerged conditions when mated to IP65/IP67 IndustrialNet™ Connectors
Protective gaskets:	Ensure environmental protection
Robust construction:	Includes plug contact plated with 50 microinches of gold to support reliable, error-free data transmission
Mated bayonet tactile lock:	Ensures positive mating between the plug and connector; rated to 750 mating cycles
Optional protective cap:	Maintains IP65/IP67 seal during mated connection
Forward motion termination:	Speeds installation and places no impact on critical components for maximum reliability
RJ45 interface:	Offers industry standard solution familiar to end users which speeds deployment

applications

IndustrialNet™ Category 6A RJ45 Plugs with Variant 5 Housing provide an ideal solution to support industrial Ethernet from the Local Area Network (LAN) based support offices to the processing devices on the plant floor even under harsh industrial conditions. Innovative design features provide a secure, reliable connection for superior data transmission in work cells where moisture and dust/particles are encountered, in temperature extremes and in applications with vibration.

Industrial bulkhead connection protects and seals against dust and water immersion common in the food and beverage industry where bacterial contamination is present and light wash down is required. High temperature resilience of up to 70°C operating offers reliable connection in manufacturing facilities such as metal processing, welding, and chemical batch processing where high temperatures are normal. In automotive panel stamping plants and work cells where vibration is a concern, IndustrialNet™ Cat 6A RJ45 Plugs with Variant 5 Housing protect the RJ45 mating.
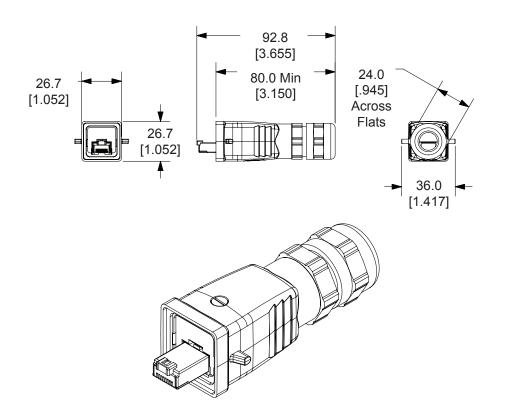
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Specification sidebar

IndustrialNet™ Category 6A RJ45 Plug with Variant 5 Housing

Plug:	MPSIV56XT
Protective cap:	MPIV5C

IndustrialNet™ Category 6A RJ45 Bulkhead Mounted Jack with Variant 5 Housing

Jack:	IAEBHV56XS
Protective cap:	IAEBHV5C

IndustrialNet™ Category 5e SF/UTP Copper Cable

CM 2-pair:	ISFCH5C02A*-XG
4-pair:	ISFCH5C04A*-XG
Flame retardant, halogen-free	
2-pair/color Teal:	ISFX5502ATL-LED
2-pair/color Red:	ISFX5502ARD-LED

IndustrialNet™ Category 5e F/UTP Copper Cable

CM 4-pair/ color Black:	IFC5C04BBL-CEG

IndustrialNet™ Category 5e U/UTP Copper Cable

CM 4-pair/ color Black:	IUC5C04ABL-CEG

IndustrialNet™ Category 6 F/UTP Copper Cable

CM 4-pair/ color Black:	IFC6C04BBL-CEG

IndustrialNet™ Category 6 U/UTP Copper Cable

CM 4-pair/ color Black:	IUC6C04ABL-CEG

IndustrialNet™ Category 6 S/FTP Copper Cable

Flame retardant, halogen-free	
4-pair/color Yellow:	ISX6004AYL-LED
4-pair/color Red:	ISX6004ARD-LED

IndustrialNet™ M12 D-Code Field Terminable Plug

Field terminable plug:	ISPS5E44MFA

IndustrialNet™ M12 X-Code Field Terminable Plug

Field terminable plug:	ISPS6A88MFA

IndustrialNet™ Category 5e Shielded 600 V-Rated Patch Cords

CM/CMX outdoor:	**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:	CADIN1IW***

*To designate color, add suffix TL (Teal), BL (Black), RD (Red), BU (Blue), GY (Gray), or YL (Yellow).
**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 of a 2-meter teal patch cord is ISTPHCH2MTL.
***For Standard colors other than Off White, replace IW in part number with BL (Black), EI (Electric Ivory), IG (International Gray), or WH (White).

26.7
[1.052]

26.7
[1.052]

92.8
[3.655]

80.0 Min
[3.150]

24.0
[.945]
Across
Flats

36.0
[1.417]

Dimensions are metric. [Dimensions in brackets are in inches.]

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iai@panduit.com

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