

# IndustrialNet™ TX6A™ Patch Cords

## SPECIFICATIONS

Industrial Ethernet patch cords shall be Category 6A, industrial grade, stranded, twisted pair cable for UTP and STP installations. Each patch cord shall be pre-terminated to include Category 6A industrial plugs on each end, wired according to the T568B standard. Patch cords shall include industrial-rated IP65/IP67 bulkhead connectors on both ends or an industrial-rated IP65/IP67 bulkhead connector on one end with an IP20-rated RJ45 connector on the other. Tethered caps shall be available on the bulkhead connectors to protect connectivity in un-mated conditions. It shall achieve an IP65/IP67 rating when mated with an IP65/IP67 and NEMA UL Type 12 industrial grade, bayonet style connector.



## TECHNICAL INFORMATION

|  |  |
|--|--|
| <b>Category 6/Class E<sub>A</sub> channel and component performance:</b> | Exceeds channel and component requirements for ANSI/TIA-68-C.2 Category 6A and ISO11801 Class EA Standards at swept frequencies 1 - 500 MHz  |
| <b>IP compliance:</b>  | Bulkhead connection rated IP65/IP67 for dust protection and temporary liquid immersion   |
| <b>IEC compliance:</b>   | Patch cords meets IEC 60603-7; housing meets IEC 61076-3-106; Variant 1, conforms to ODVA mechanical specifications  |
| <b>FCC and ANSI/TIA compliance:</b>                                      | Meets ANSI/TIA-1096-A; contacts plated with 50 microinches of gold for superior performance  |
| <b>PoE compliance:</b>   | Meets IEEE 802.3af and IEEE 802.3at for PoE applications   |
| <b>NEMA/UL compliance:</b>   | Bulkhead connection rated UL Type 12 to provide protection against circulating dust, falling dirt, and dripping noncorrosive liquids   |
| <b>RoHS compliance:</b>  | Compliant  |
| <b>Environmental protection:</b>   | 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 |
| <b>Materials:</b>  | Constructed of 24 AWG STP stranded industrial grade cable, using UTP or STP IndustrialNet TX6A Modular Plugs and IP65/IP67 housings for UTP or STP patch cords respectively  |
| <b>Temperature rating:</b>   | -4°F to 158°F (-20°C to 70°C) during operation   |

## KEY FEATURES AND BENEFITS

|   |   |
|---|---|
| <b>100% Performance tested:</b>                     | Provides confidence that each patch cord delivers Category 6A performance at the component level.   |
| <b>IP/NEMA/UL rated connection:</b>                 | Withstands light wash down and temporary submerged conditions in harsh factory environments without loss of performance when mated to IP65/IP67 IndustrialNet Connectors. |
| <b>Bayonet style interface:</b>                     | Provides quick installation for lowest installed cost.  |
| <b>Mated bayonet tactile lock:</b>                  | Ensures positive mating between the plug and connector; rated to 100 mating cycles enabling moves, adds and changes for future upgrades.                                  |
| <b>Robust construction:</b>                         | Includes plug contact plated with 50 microinches of gold to support reliable error-free data transmission.  |
| <b>Caps available for both receptacle and plug:</b> | Protect disengaged connectivity from environmental harm preserving connection integrity when plug is mated later to the jack.   |

### IndustrialNet TX6A Patch Cords

|  |             |
|--|-------------|
| <b>UTP with bulkhead connector on both ends:</b> | IUTP6X*MBL  |
| <b>UTP with bulkhead connector on one end:</b>   | IUTP6X1MBLR |
| <b>STP with bulkhead connector on both ends:</b> | ISTP6X*MBL  |
| <b>STP with bulkhead connector on one end:</b>   | ISTP6X*MBLR |

### IndustrialNet TX6A Connectors

|                    |           |
|--------------------|-----------|
| <b>Unshielded:</b> | IAEBH6X   |
| <b>Shielded:</b>   | IAEBH6XS  |
| <b>Coupler</b>     |           |
| <b>Shielded:</b>   | IAEBHC6XS |

### IndustrialNet Stainless Steel Faceplates

|                     |           |
|---------------------|-----------|
| <b>Single gang:</b> | IAEFP1    |
| <b>Double gang:</b> | IAEFP2-2G |

\*Meter lengths: 1, 2, 3, 5, or 10 meters



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

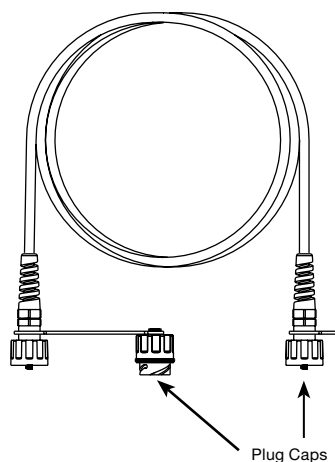
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## APPLICATIONS

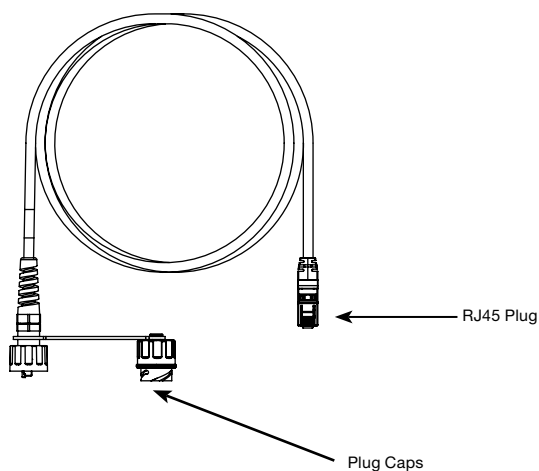
IndustrialNet TX6A Patch Cords provide an ideal solution to support industrial Ethernet from the Local Area Network (LAN) based support offices to the processing devices on the plant floor even under harsh industrial conditions. Innovative design features provide a secure, reliable connection for superior 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 85°C storage and 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, the IndustrialNet TX6A Patch Cords protect the RJ45 mating.

## ENGINEERING DRAWINGS

IP67-IP67 with Caps



IP67 with Cap – IP20 without Cap



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