

ITP-500

IP56, 5x 10/100Base M12

- ▲ M12 connector for Ethernet and Power
- ▲ Slim and Fanless Design
- ▲ EN50155, EN50121-4, EN61000-6-2, EN61000-6-4, CE and FCC certified



An EN50155 certified M12 type Ethernet switch, ITP-500 has 5 10/100Base-TX Fast Ethernet ports, fanless, IP56 protection, designed for industrial applications in harsh environments, and utilizes M12 connectors to ensure waterproof, sturdy connections and guaranteed reliable operation without environmental disturbances such as vibration and shock. EN50155 certification covers critical regulation of operating temperature, mains input voltage, surge, ESD, vibration and shock, making it suitable for industrial applications such as vehicles, rolling stock and factory automation.

Features

- Use M12 connector anti vibration and shock for vehicle, rolling stock, and railway applications
- Slim design
- DC input power 12/24/48VDC (8.4~60VDC)
- Wide operating temperature -40~75° C (ITP-500-E)
- CE, FCC, EN50155 and EN50121-4 for railway certified
- Industrial Grade EMS, EMI, EN61000-6-2, EN61000-6-4 certified

Specifications

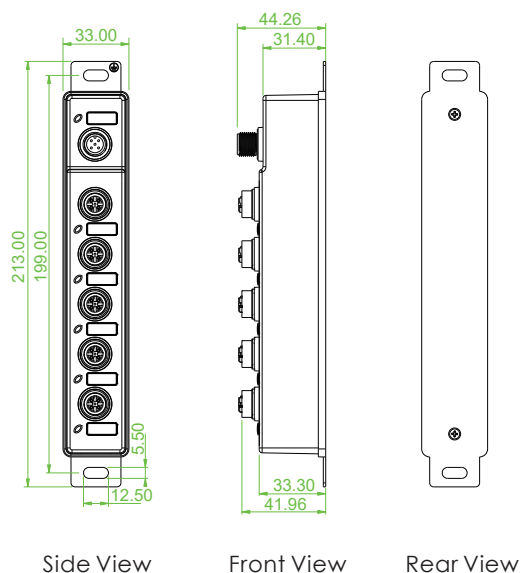
| | | |
|-----------------------------|--|--------------------------------|
| IEEE Standard | IEEE 802.3 | 10Base-T Ethernet |
| | IEEE 802.3u | 100Base-TX Fast Ethernet |
| | IEEE 802.3x | Flow Control and Back Pressure |
| Switch Architecture | Back-plane (Switching Fabric): 1Gbps (Full wire-speed) | |
| Data Processing | Store and Forward | |
| Flow Control | IEEE 802.3x flow control, back pressure flow control | |
| MAC Address Table | 1 K | |
| Packet Buffer Size | 448Kbits | |
| Network Connector | 5x M12 D-code Female | |
| | 10/100Base-TX Auto negotiation speed | |
| | Auto MDI/MDI-X function | |
| | Full/Half duplex | |
| Network Cable | UTP/STP Cat. 5e cable above | |
| | EIA/TIA-568 100-ohm (100meter) | |
| Protocols | CSMA/CD | |
| LED | Per unit: Power (Green) | |
| | Per port: Link/Active (Green) | |
| Reverse Polarity Protection | Present for power input | |
| Overload Current Protection | Supported | |
| Power Supply | DC 12/24/48V (8.4~60VDC) Input power | |

| Power Connector | 5 Pin Male A-Code M12 | | | | | | | | |
|-----------------------|--|---------------|---------|-------|------|-------|------|-------|------|
| Power Consumption | <table border="1"> <thead> <tr> <th>Input Voltage</th> <th>ITP-500</th> </tr> </thead> <tbody> <tr> <td>12VDC</td> <td>0.8W</td> </tr> <tr> <td>24VDC</td> <td>1.0W</td> </tr> <tr> <td>48VDC</td> <td>1.9W</td> </tr> </tbody> </table> | Input Voltage | ITP-500 | 12VDC | 0.8W | 24VDC | 1.0W | 48VDC | 1.9W |
| Input Voltage | ITP-500 | | | | | | | | |
| 12VDC | 0.8W | | | | | | | | |
| 24VDC | 1.0W | | | | | | | | |
| 48VDC | 1.9W | | | | | | | | |
| Operating Temperature | -40°C~75°C | | | | | | | | |
| Operating Humidity | 5% to 95% (Non-condensing) | | | | | | | | |
| Storage Temperature | -40°C~85°C | | | | | | | | |
| Housing | IP56 Rugged housing, and fanless | | | | | | | | |
| Dimensions | 44.3 x 33 x 213 mm (D x W x H) | | | | | | | | |
| Weight | 150g | | | | | | | | |
| Installation Mounting | Wall mounting | | | | | | | | |
| MTBF | 2,315,383 Hours (MIL-HDBK-217) | | | | | | | | |
| Warranty | 5 years | | | | | | | | |

Certification

| | |
|---|---|
| EMC | CE |
| EMI | FCC, FCC Part 15 Subpart B Class A, CE |
| Railway Traffic | EN50155, EN50121-4 |
| Immunity for Heavy Industrial Environment | EN61000-6-2 |
| Emission for Heavy Industrial Environment | EN61000-6-4 |
| EMS (Electromagnetic Susceptibility) Protection Level | EN61000-4-2 (ESD) Level 3, Criteria B |
| | EN61000-4-3 (RS) Level 3, Criteria A |
| | EN61000-4-4 (Burst) Level 3, Criteria A |
| | EN61000-4-5 (Surge) Level 3, Criteria B |
| | EN61000-4-6 (CS) Level 3, Criteria A |
| | EN61000-4-8 (PFMF, Magnetic Field) Field Strength: 300A/m, Criteria A |
| Shock | IEC 61373 |
| Freefall | IEC 60068-2-32 |
| Vibration | IEC 61373 |

Dimensions



Side View

Front View

Rear View

Ordering Information

| Model Name | Total Port | UTP Port M12 | Power Supply | Certification | | | | Shock Vibration | Operating Temperature |
|------------|------------|---------------|-------------------------|---------------|-----------|----------------------------|-----------|-----------------|-----------------------|
| | | 10/100Base-TX | 12/24/48VDC (8.4~60VDC) | EN50155 | EN50121-4 | EN61000-6-2 EN61000-6-4 | CE FCC | IEC61373 | |
| ITP-500-E | 5 | 5 | 1 | V | V | V | V | V | -40~75°C |

Optional Accessories

Optional Cable/Connector

P/N: CAB-M12DM4-RJ45

M12 D-code Male (4-Pin) to RJ-45, AWG 24, IP67, 1 meter



For FE UTP

P/N: CAB-M12AF5-OPEN

M12 A-code Female (5-Pin) to open wire, AWG 22, IP67, 1 meter



For Power

P/N: M12D-M4

M12 D-code Male (4-Pin) connector, IP67



For FE UTP

P/N: M12A-F5

M12 A-code Female (5-Pin) connector, IP67



For Power