

## ITP-500A

5x FE M12



- ◆ M12 Connector for Ethernet and Power
- ◆ Rugged Metal Housing, Slim and Fanless Design
- ◆ EN50155, EN50121-4, EN45545-2, EN61000-6-2, EN61000-6-4, CE and FCC Certified



An EN50155 certified M12 type Ethernet switch, ITP-500A has 5x 10/100Base-TX Fast Ethernet ports, fanless, IP40 protection, designed for industrial applications in harsh environments, it uses M12 connectors for secure connections, ensuring reliable operation without environmental interference 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-500A-E)

### Specifications

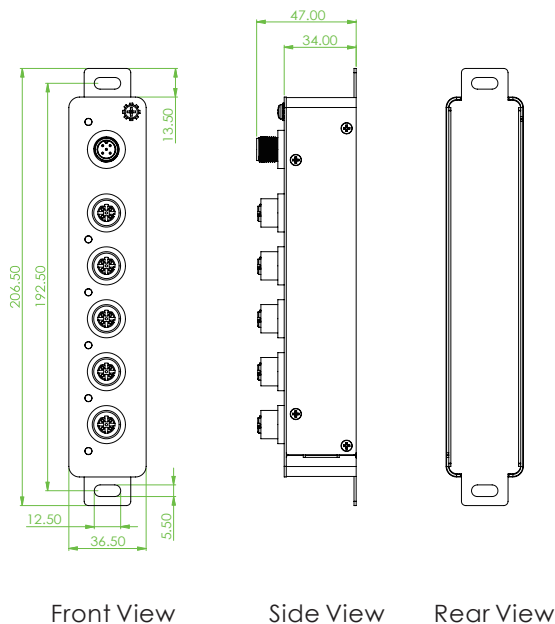
<b>Standard</b>	IEEE 802.3	10Base-T Ethernet
	IEEE 802.3u	100Base-TX Fast Ethernet
	IEEE 802.3x	Flow Control and Back Pressure
<b>Switch Architecture</b>	Back-plane (Switching Fabric): 1Gbps (Full wire-speed)	
<b>Data Processing</b>	Store and Forward	
<b>Flow Control</b>	IEEE 802.3x flow control, back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

# EN50155 Ethernet Switch

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<b>Power Consumption</b>	<b>Input Voltage</b>	ITP-500A
	12VDC	0.8W
	24VDC	1.0W
	48VDC	1.9W
<b>Operating Temperature</b>	-40 ~ 75°C	
<b>Operating Humidity</b>	5% to 95% (Non-condensing)	
<b>Storage Temperature</b>	-40 ~ 85°C	
<b>Housing</b>	IP40 Rugged metal and fanless	
<b>Dimensions</b>	47 x 36.5 x 206.5mm (D x W x H)	
<b>Weight</b>	425g	
<b>Installation Mounting</b>	Wall mounting	
<b>MTBF</b>	2,315,383 Hours (MIL-HDBK-217)	
<b>Warranty</b>	5 years	
<b>Certification</b>		
<b>EMC</b>	CE	
<b>EMI</b>	FCC, FCC Part 15 Subpart B Class A, CE	
<b>Railway Traffic</b>	EN50155, EN50121-4	
<b>Fire Protection of Railway Vehicles</b>	EN45545-2	
<b>Immunity for Heavy Industrial Environment</b>	EN61000-6-2	
<b>Emission for Heavy Industrial Environment</b>	EN61000-6-4	
<b>EMS (Electromagnetic Susceptibility) Protection Level</b>	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	
	EN 61000-4-11 Voltage Dips	
<b>Shock</b>	IEC 61373	
<b>Freefall</b>	IEC 60068-2-32	
<b>Vibration</b>	IEC 61373	

## Dimensions



## Ordering Information

Model Name	Total Port	UTP M12	Power Supply	Certification				Shock Vibration	Operating Temperature
		10/100Base-TX	12/24/48 VDC	EN50155 EN50121-4	EN45545-2	EN61000-6-2 EN61000-6-4	CE FCC	IEC61373	
ITP-500A-E	5	5	1	V	V	V	V	V	-40~75°C

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## 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