

## IP56, 5x FE 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 5x 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

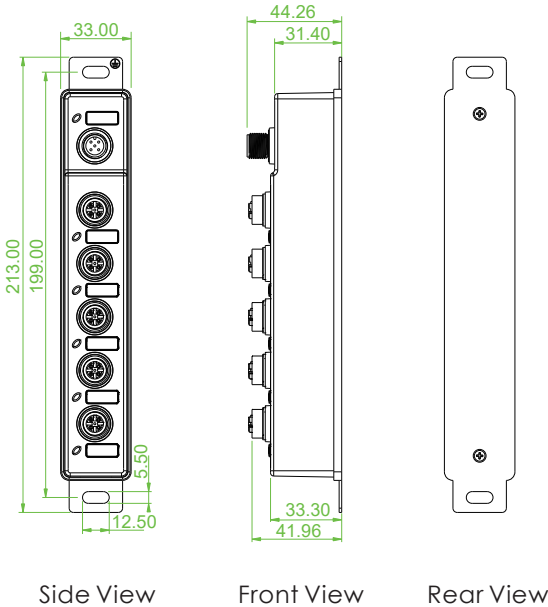
## Specifications

<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

Power Consumption	Input Voltage	ITP-500
	12VDC	0.8W
	24VDC	1.0W
	48VDC	1.9W
Operating Temperature	-40 ~ 75°C	
Operating Humidity	5% to 95% (Non-condensing)	
Storage Temperature	-40 ~ 85°C	
Housing	IP56 Rugged housing and fanless	
Dimensions	44.3 x 33 x 213mm (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	
	EN 61000-4-11 Voltage Dips	
Shock	IEC 61373	
Freefall	IEC 60068-2-32	
Vibration	IEC 61373	

## Dimensions



# EN50155 Ethernet Switch

## Ordering Information

Model Name	Total Port	UTP M12	Redundant Power Supply	Certification				Shock Vibration	Operating Temperature
		10/100Base-TX		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