# 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)

Specifications

- 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

<b>Specificatio</b>	115						
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 Protect	tion Present for powe	erinput					
Overload Current Protection	Supported						
Power Supply	DC 12/24/48V (8.4~60VDC) Input power						



# **EN50155 Managed Switch**



Power Connector	5 Pin Male A-Code M12					
Power Consumption						
Tower consumption	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						
	CE					
EMI	CE FCC, FCC Part 15 Subpart B Class A, CE					
EMC EMI Railway Traffic						
EMI Railway Traffic Immunity for Heavy Industrial Environment	FCC, FCC Part 15 Subpart B Class A, CE					
EMI Railway Traffic Immunity for Heavy	FCC, FCC Part 15 Subpart B Class A, CE EN50155, EN50121-4					
EMI Railway Traffic Immunity for Heavy Industrial Environment Emission for Heavy Industrial Environment EMS	FCC, FCC Part 15 Subpart B Class A, CE EN50155, EN50121-4 EN61000-6-2					
EMI Railway Traffic Immunity for Heavy Industrial Environment Emission for Heavy Industrial Environment EMS (Electromagnetic	FCC, FCC Part 15 Subpart B Class A, CE EN50155, EN50121-4 EN61000-6-2 EN61000-6-4					
EMI Railway Traffic Immunity for Heavy Industrial Environment Emission for Heavy Industrial Environment EMS (Electromagnetic Susceptibility)	FCC, FCC Part 15 Subpart B Class A, CE EN50155, EN50121-4 EN61000-6-2 EN61000-6-4 EN61000-4-2 (ESD) Level 3, Criteria B					
EMI Railway Traffic Immunity for Heavy Industrial Environment Emission for Heavy Industrial Environment EMS (Electromagnetic	FCC, FCC Part 15 Subpart B Class A, CE EN50155, EN50121-4 EN61000-6-2 EN61000-6-4 EN61000-4-2 (ESD) Level 3, Criteria B EN61000-4-3 (RS) Level 3, Criteria A					
EMI Railway Traffic Immunity for Heavy Industrial Environment Emission for Heavy Industrial Environment EMS (Electromagnetic Susceptibility)	FCC, FCC Part 15 Subpart B Class A, CE EN50155, EN50121-4 EN61000-6-2 EN61000-6-4 EN61000-4-2 (ESD) Level 3, Criteria B EN61000-4-3 (RS) Level 3, Criteria A EN61000-4-4 (Burst) Level 3, Criteria A					
EMI Railway Traffic Immunity for Heavy Industrial Environment Emission for Heavy Industrial Environment EMS (Electromagnetic Susceptibility)	FCC, FCC Part 15 Subpart B Class A, CE EN50155, EN50121-4 EN61000-6-2 EN61000-6-4 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					

# Dimensions

IEC 61373

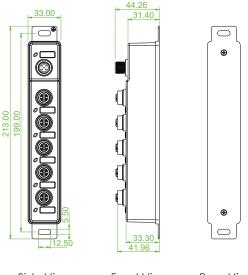
IEC 61373

IEC 60068-2-32

Shock

Freefall

Vibration



Side View

Front View

Rear View





## Ordering Information

	<b>.</b>	UTP Port M12	Redundant Power Supply Certification		Shock Vibration				
	Total Port	10/100Base-TX	12/24/48VDC (8.4~60VDC)	EN50155	EN50121-4	EN61000-6-2 EN61000-6-4	CE FCC	IEC61373	Operating Temperature
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