

ITP-800A

8x 10/100Base M12



- M12 connector for Ethernet and Power
- EN50155, EN50121-4, EN45545-2 for railway certified
- Rugged metal housing and fanless design
- Build-in 2 bypass port
- 12/24/48VDC redundant dual input power



Ver.2022 Jan

The ITP-800A is an unmanaged, industrial grade, Fast Ethernet switch, with 8 x 10/100Base-TX Ethernet ports and is designed for industrial applications in harsh environments. The Ethernet ports utilize M12 connectors to ensure water-tight, robust connections and guarantee reliable operation against environmental disturbances such as vibration and shock. This switch is compliant with EN50155, covering operating temperature, power input voltage, surge, ESD, vibration, and shock, thus making it suitable for industrial applications in vehicle, rolling stock and factory automation.

Features

- Use M12 connector anti vibration and shock for vehicle, rolling stock, and railway applications
- Build-in 2 bypass port to avoid one or more nodes power fail in a bus structure to collapse the network
- Redundant dual DC input power 12/24/48VDC (8.4~60VDC)
- Rugged metal, IP40 protection and fanless design
- Wide operating temperature -40~75°C
- CE, FCC, EN50155, EN50121-4 and EN45545-2 for railway certified
- Industrial Grade EMS, EMI, EN61000-6-2, EN61000-6-4 certified

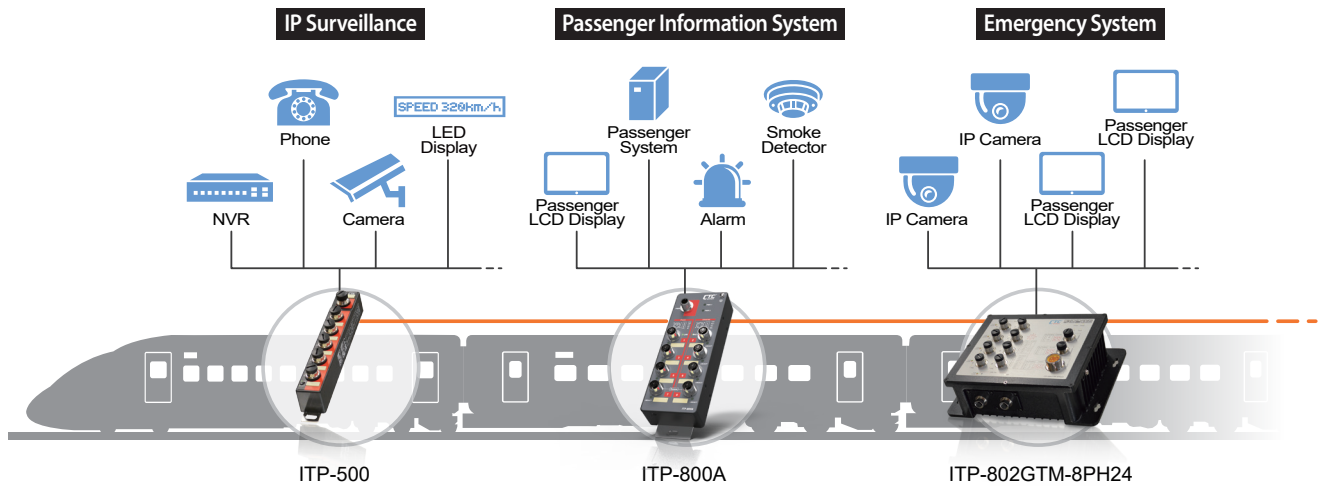
Specifications

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): 1.6Gbps (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	
	8x M12 D-code Female	
	10/100Base-TX auto negotiation speed	
	Auto MDI/MDI-X function	
	Full/Half duplex	
Network Cable	Built in 2 bypass port	
	10Base-T: 2-pair UTP/STP Cat. 5e cable	
	EIA/TIA-568 100-ohm (100m)	
	100Base-TX: 2-pair UTP/STP Cat. 5e cable	
	EIA/TIA-568 100-ohm (100m)	
Protocols	CSMA/CD	
LED	Per unit: Power 1 (Green), Power 2 (Green)	
	Per port: Link/Active (Green)	
Reverse Polarity Protection	Present for power input	
Overload Current Protection	Supported	
Power Supply	Redundant Dual DC 12/24/48V (8.4~60VDC) Input power	
Power Connector	5 Pin Male A-Code M12	
Power Consumption	Input Voltage	ITP-800A
	12VDC	1.8W
	24VDC	2.2W
	48VDC	3.4W

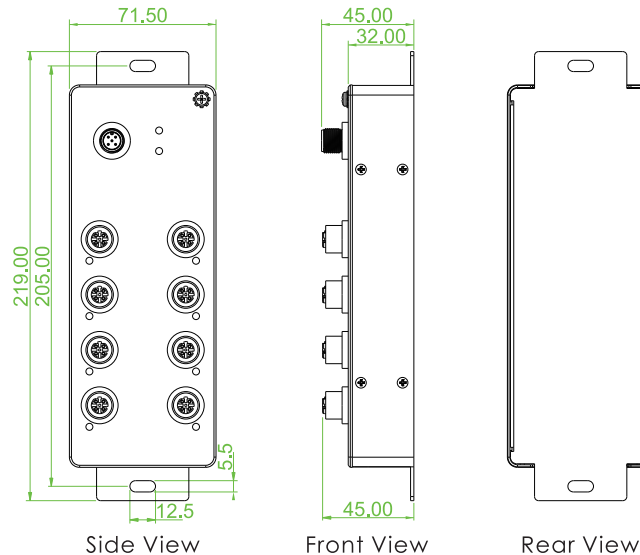
Operating Temperature	-40°C~75°C
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40°C~85°C
Housing	Rugged metal housing, IP40 protection and fanless
Dimensions	45x 71.5x 219 mm (D x W x H)
Weight	420g
Installation Mounting	Wall mounting
MTBF	1,492,660 Hours (MIL-HDBK-217)
Warranty	5 years
Certification	
EMC	CE (EN55024, EN55032)
EMI	FCC, FCC Part 15 Subpart B Class A, CE
Railway Traffic	EN50155, EN50121-4
Fire Protection of Railway Vehicles	EN45545-2
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

Application

Figure 1 : ITP Series in Onboard Train Application



Dimensions



Ordering Information

Model Name	Total Port	UTP Port M12	Redundant Power Supply	Certification				Shock Vibration	Operating Temperature
		10/100 Base-TX	12/24/48VDC (8.4~60VDC)	EN45545-2	EN50155 EN50121-4	EN61000-6-2 EN61000-6-4	CE FCC	IEC61373	
ITP-800A-E	8	8	V	V	V	V	V	V	-40~75°C

Package List

- ITP-800A-E device
- Wall mount
- Protective caps for UTP port and power

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