EN50155 Ethernet Switch



ITP-800A

8x 10/100Base M12

- M12 connector for Ethernet and Power
- ▲ EN50155, EN50121-4, EN45545-2, EN61000-6-2, EN61000-6-4, CE and FCC certified
- Rugged metal housing and fanless design
- Build-in 2 bypass port
- ▲ 12/24/48VDC redundant dual input power





The EN50155 certified M12 type Ethernet switch, ITP-800A, metal housing, have 8 10/100Base-TX Fast Ethernet ports, fanless, IP40 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
- 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					
	Built in 2 bypass port					
Network Cable	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 Protec	tion Present for powe	er input				

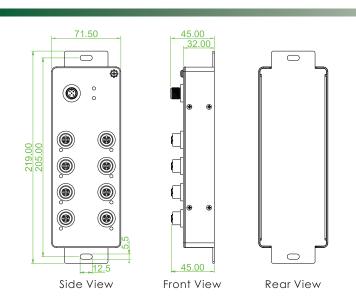
EN50155 Managed Switch

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Overload Current Protection	on _{Supported}		
Power Supply	Redundant Dual DC 12/24/4	18V (8.4~60VDC) Input	power
Power Connector	5 Pin Male A-Code M12	· · · ·	
Power Consumption	Input Voltage	ITP-800A	
	12VDC	1.8W	1
	24VDC	2.2W	
	48VDC	3.4W	
Operating Temperature	-40°C~75°C		
Operating Humidity	5% to 95% (Non-condensin	g)	
Storage Temperature	-40°C~85°C	<u>.</u>	
Housing	Rugged metal housing, IP4() protection and fanle	SS
Dimensions	45x 71.5x 219 mm (D x W x H	1)	
Weight	420g		
Installation Mounting	Wall mounting		
MTBF	1,492,660 Hours (MIL-HDBK	(-217)	
Warranty	5 years		

Certification

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	EN61000-4-2 (ESD) Level 3, Criteria B				
(Electromagnetic	EN61000-4-3 (RS) Level 3, Criteria A				
Susceptibility) Protection Level	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				







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Ordering Information

Model Name Total Port		UTP Port M12 Redundant Power Supply		Certification				Shock Vibration	
		10/100Base-TX	12/24/48VDC (8.4~60VDC)	EN50155 EN50121-4	EN45545-2	EN61000-6-2 EN61000-6-4	CE FCC	IEC61373	Operating Temperature
ITP-800A-E	8	8	V	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: M12A-F5 M12 A-code Female (5-Pin) connector, IP67



For Power

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