

IP56, 8x FE M12 with 8x PoE 120W, 24/48VDC

- » 24/48VDC Redundant Dual Power Input
- » Regulated PoE Output Voltage
- » M12/M23 Connector for UTP and Power
- » EN50155, EN50121-4, EN61000-6-2, EN61000-6-4, EN62368-1, CE and FCC Certified
- » IP56 Protection for Water and Dust



The EN50155 certified M12 PoE switches ITP-800-8PH24, plastic housing IP56 protection, have 8x 10/100Base-TX M12 D-code Ethernet ports, fanless and redundant power input. Designed for heavy industrial, vehicle and rolling stock applications, utilizing M12 connectors to ensure secure connections and reliable operation, and withstand environmental disturbances such as vibration and shock. 24VDC power input design, compatible with vehicle battery power supply, realizes PoE function through voltage boosting. EN50155 certification covers operating temperature, mains input voltage, surge, ESD, vibration and shock, making the switch suitable for vehicle, rolling stock applications.

Features

- Use M12/M23 connector anti vibration and shock for vehicle, rolling stock, and railway applications
- 24/48VDC (20~57VDC) redundant dual input power with built-in very high efficiency (97~98%) to boost PoE output voltage to 50VDC
- Regulated PoE output voltage (50VDC) to stabilize PoE device, and guarantee delivery PoE power distance to 100 meters
- Wide operating temperature -40~75°C (ITP-800-8PHE24)
- CE, FCC, EN62368-1, EN50155 and EN50121-4 for railway certified
- Industrial Grade EMS, EMI, EN61000-6-2, EN61000-6-4 certified

Specifications

Standard	IEEE 802.3	10Base-T Ethernet
	IEEE 802.3u	100Base-TX Fast Ethernet
	IEEE 802.3x	Flow Control and Back Pressure
	IEEE 802.3af	PoE (Power over Ethernet)
	IEEE 802.3at	PoE+ (Power over Ethernet enhancements)
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	1K	
Packet Buffer Size	448Kbits	
Network Connector	8x 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	

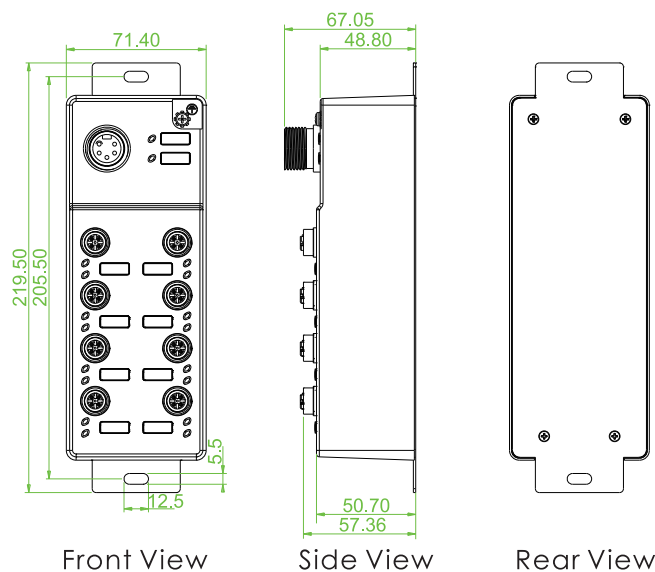
EN50155 PoE Switch

LED	System: Power 1 (Green), Power 2 (Green)				
	Per: Link/Active (Green)				
	PoE: ON (Green)				
Reverse Polarity Protection	Present for power input				
Overload Current Protection	Supported				
PoE Standard	IEEE 802.3af, IEEE 802.3at				
PoE Power Budget	PoE power budget 120W (30W/port), Regulated PoE output voltage at 50VDC				
Power Supply	Provides 1x M23 (5-Pin, male) for redundant dual DC, 24/48V (20~57VDC) input power				
	Built-in very high efficiency (97~98%) to boost PoE output voltage to 50VDC				
	Regulate PoE output voltage (50VDC) to stabilize PoE device, and guarantee delivery PoE power distance to 100 meters				
Power Consumption	Input Voltage	Total Power Consumption	Device Power Consumption	PoE Budget	Boost Efficiency
	24 VDC	125W	3.6W	120W	98%
	48 VDC	127W	4.3W	120W	97%
Operating Temperature	-10 ~ 60°C (ITP-800-8PH24) -40 ~ 75°C (ITP-800-8PHE24)				
Operating Humidity	5% to 95% (Non-condensing)				
Storage Temperature	-40 ~ 85°C				
Housing	IP56 water-proof grade housing and fanless				
Dimensions	67 x 71.4 x 219.5mm (D x W x H)				
Weight	715g				
Installation Mounting	Wall mounting				
MTBF	937,878 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				
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				
	EN61000-4-11 Voltage Dips				
Safety	EN62368-1				
Shock	IEC 61373				
Freefall	IEC 60068-2-32				
Vibration	IEC 61373				

EN50155 PoE Switch

5

Dimensions



Ordering Information

Model Name	Total Port	UTP M12	PoE	PoE Total Power Budget	Power Input	Certification				Operating Temperature
		10/100 Base-TX	IEEE 802.3at		Redundant	EN50121-4 EN50155	EN62368-1	CE, FCC	EN61000-6-2 EN61000-6-4	
ITP-800-8PH24	8	8	8	120W	24/48VDC	V	V	V	V	-10~60°C
ITP-800-8PHE24	8	8	8	120W	24/48VDC	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 100M UTP

P/N: CAB-M23F5-OPEN

M23 Female (5-Pin) to open wire, (AWG 16) , IP67, 1 meter



For Power

P/N: M12D-M4

M12 D-code Male (4-Pin) connector, IP67



For 100M UTP