

ITP-800A-8PH24

8x 10/100Base M12 with 8x PoE 120W, 24/48VDC

- ▲ 24/48VDC redundant dual input power
- ▲ Regulated PoE output voltage
- ▲ M12/M23 connector for UTP and Power
- ▲ EN50155, EN50121-4, EN61000-6-2, EN61000-6-4, EN62368-1, EN45545-2, CE and FCC certified



The EN50155 certified M12 PoE switches ITP-800A-8PH24, metal housing IP40 protection, have 8 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-800A-8PHE24)
- CE, FCC, EN62368-1, EN51055, 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
	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	1 K	
Packet Buffer Size	448Kbits	
Network Connector	8x M12 D-code Female	
	10/100Base-TX Auto negotiation speed	
	Auto MDI/MDI-X function	
Network Cable	Full/Half duplex	
	UTP/STP Cat. 5e cable above	
Protocols	EIA/TIA-568 100-ohm (100meter)	
	CSMA/CD	

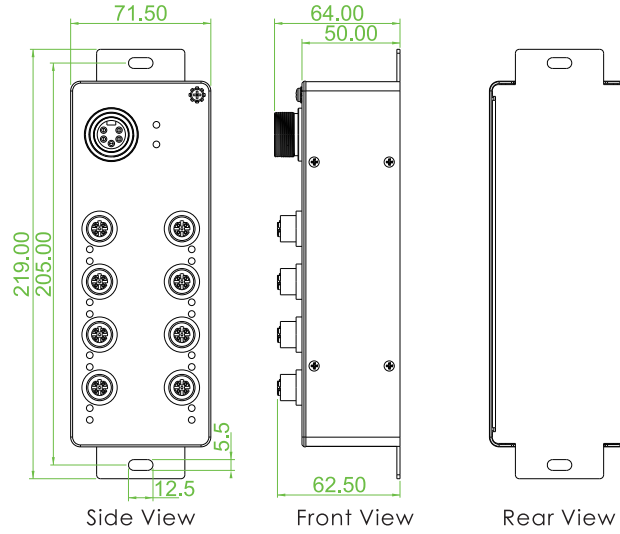
EN50155 PoE Switch

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	Maximum PoE output power budget 120W (30W/per 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	<table border="1"> <thead> <tr> <th>Input Voltage</th> <th>Total Power Consumption</th> <th>Device Power Consumption</th> <th>PoE Budget</th> <th>Boost Efficiency</th> </tr> </thead> <tbody> <tr> <td>24 VDC</td> <td>125W</td> <td>3.6W</td> <td>120W</td> <td>98%</td> </tr> <tr> <td>48 VDC</td> <td>127W</td> <td>4.3W</td> <td>120W</td> <td>97%</td> </tr> </tbody> </table>	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%
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°C~60°C (ITP-800A-8PH24) -40°C~75°C (ITP-800A-8PHE24)															
Operating Humidity	5% to 95% (Non-condensing)															
Storage Temperature	-40°C~85°C															
Housing	Rugged metal, IP40 protection housing, and fanless															
Dimensions	64 x 71.5 x 219 mm (D x W x H)															
Weight	860g															
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
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 EN61000-4-11 Voltage Dips
Safety	EN62368-1
Shock	IEC 61373
Freefall	IEC 60068-2-32
Vibration	IEC 61373

Dimensions



Ordering Information

Model Name	Total Port	UTP Port M12	PoE Port	PoE Total Power Budget	Power Input	Certification						Shock Vibration	Operating Temperature
		10/100 Base-TX	IEEE802.3at		Redundant	EN45545-2	EN62368-1	EN50155 EN50121-4	EN61000-6-2 EN61000-6-4	CE, FCC	IEC61373		
ITP-800A-8PH24	8	8	8	120W	24/48VDC	V	V	V	V	V	V	V	-10~60°C
ITP-800A-8PHE24	8	8	8	120W	24/48VDC	V	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: 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 FE UTP