

# ITP-800A-8PH24

## EN50155 PoE Switch

### 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, EN45545-2, CE and FCC Certified



The EN50155 certified M12 PoE switches ITP-800A-8PH24, metal housing IP40 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

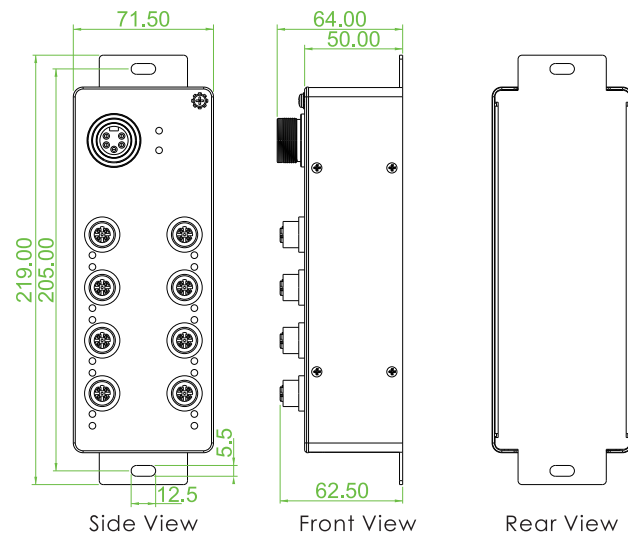
- Use M12/M23 connector anti vibration and shock for vehicle, rolling stock, and railway applications
- 24/48VDC (20~57VDC) redundant dual input power with built-in very high efficiency (97~98%) to boost PoE output voltage to 50VDC
- Regulated PoE output voltage (50VDC) to stabilize PoE device, and guarantee delivery PoE power distance to 100 meters
- Wide operating temperature -40~75°C (ITP-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

<b>Standard</b>	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)
<b>Switch Architecture</b>	Back-plane (Switching Fabric): 1.6Gbps (Full wire-speed)	
<b>Data Processing</b>	Store and Forward	
<b>Flow Control</b>	IEEE 802.3x flow control, back pressure flow control	
<b>MAC Address Table</b>	1 K	
<b>Packet Buffer Size</b>	448Kbits	
<b>Network Connector</b>	8x M12 D-code Female	
	10/100Base-TX Auto negotiation speed	
	Auto MDI/MDI-X function	
	Full/Half duplex	
<b>Network Cable</b>	UTP/STP Cat. 5e cable above	
	EIA/TIA-568 100-ohm (100meter)	
<b>Protocols</b>	CSMA/CD	

<b>LED</b>	System: Power 1 (Green), Power 2 (Green)				
	Per: Link/Active (Green)				
	PoE: ON (Green)				
<b>Reverse Polarity Protection</b>	Present for power input				
<b>Overload Current Protection</b>	Supported				
<b>PoE Standard</b>	IEEE 802.3af, IEEE 802.3at				
<b>PoE Power Budget</b>	Maximum PoE output power budget 120W (30W/port), Regulated PoE output voltage at 50VDC				
<b>Power Supply</b>	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				
<b>Power Consumption</b>	<b>Input Voltage</b>	<b>Total Power Consumption</b>	<b>Device Power Consumption</b>	<b>PoE Budget</b>	<b>Boost Efficiency</b>
	24 VDC	125W	3.6W	120W	98%
	48 VDC	127W	4.3W	120W	97%
<b>Operating Temperature</b>	-10 ~ 60°C (ITP-800A-8PH24) -40 ~ 75°C (ITP-800A-8PHE24)				
<b>Operating Humidity</b>	5% to 95% (Non-condensing)				
<b>Storage Temperature</b>	-40 ~ 85°C				
<b>Housing</b>	Rugged metal, IP40 protection housing and fanless				
<b>Dimensions</b>	64 x 71.5 x 219mm (D x W x H)				
<b>Weight</b>	860g				
<b>Installation Mounting</b>	Wall mounting				
<b>MTBF</b>	937,878 Hours (MIL-HDBK-217)				
<b>Certification</b>					
<b>EMC</b>	CE (EN55024, EN55032)				
<b>EMI</b>	FCC, FCC Part 15 Subpart B Class A CE				
<b>Railway Traffic</b>	EN50155, EN50121-4				
<b>Fire Protection of Railway Vehicles</b>	EN45545-2				
<b>Immunity for Heavy Industrial Environment</b>	EN61000-6-2				
<b>Emission for Heavy Industrial Environment</b>	EN61000-6-4				
<b>EMS (Electromagnetic Susceptibility) Protection Level</b>	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				
<b>Safety</b>	EN62368-1				
<b>Shock</b>	IEC 61373				
<b>Freefall</b>	IEC 60068-2-32				
<b>Vibration</b>	IEC 61373				

## Dimensions



## Ordering Information

Model Name	Total Port	UTP M12	PoE	PoE Total Power Budget	Power Input	Certification					Shock Vibration	Operating Temperature
		10/100 Base-TX	IEEE 802.3at		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	-10~60°C
ITP-800A-8PHE24	8	8	8	120W	24/48VDC	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-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