

# ITP-800-M12-4PH24

EN50155 8x 10/100Base-TX with M12 and 4x PoE+ Ethernet Switch



NEW



6 PoE ethernet switch for vehicle

ITP-800-M12-4PH24 non-managed Ethernet switch provides 8x 10/100Base-TX Fast Ethernet ports with 4 ports having IEEE 802.3af/at compliant PoE+ (Power over- Ethernet). These switches are classified as power source equipment (PSE) and provide up to 30 watts of power per port. The ITP-800-M12- 4PH24 Ethernet switches are designed for industrial applications in harsh environments. The Ethernet ports utilize M12 connectors to ensure tight, robust connections, and guarantee reliable operation against environmental disturbances such as vibration and shock. The ITP-800-M12-4PH24 Ethernet switches are compliant with EN 50155, covering operating temperature, power input voltage, surge, ESD, vibration, and shock, thus making these switches suitable for industrial applications in vehicle, rolling stock and railways.

## Features

- Provides 4-port IEEE802.3af/at PoE output (30W per port)
- 24/48VDC (20~57VDC) redundant dual input power, and built-in power booster
- Constant and regulated PoE output voltage at 55VDC
- 8-Port 10/100Base-TX Ethernet Switch
- Use M12 connector anti vibration and shock for vehicle, rolling stock, and railway applications
- Supports flow control
- Supports broadcast storm protection
- Supports auto-negotiation and auto-MDI/MDI-X
- Supports alarm message by relay
- Built in 2 bypass ports
- DIN rail or wall mounting installation
- IP40 rugged metal housing
- Wide operating temperature -40~75°C (ITP-800-M12-4PHE24)
- UL60950-1, CE, FCC, EN50155 for railway certification
- Industrial Grade EMS, EMI, EN61000-6-2, EN61000-6-4 certified

## Specifications

<b>IEEE Standard</b>	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE802.3x Flow Control and Back Pressure IEEE802.3at Power over Ethernet+, PoE+ IEEE802.3af Power over Ethernet, PoE
<b>Switch Architecture</b>	Back-plane (Switching Fabric): 1.6Gbps
<b>Data Processing</b>	Store and Forward
<b>Flow Control</b>	IEEE 802.3x flow control, back pressure flow control
<b>Provides Broadcast Storm Protection</b>	Present
<b>MAC Address Table</b>	2 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 Built in 2 bypass ports
<b>Network Cable</b>	10Base-T: 2-pair UTP/STP Cat. 5 cable EIA/TIA-568 100-ohm (100m) 100Base-TX: 2-pair UTP/STP Cat. 5 cable EIA/TIA-568 100-ohm (100m)
<b>Protocols</b>	CSMA/CD
<b>LED</b>	Per unit: Power 1 (Green), Power 2 (Green), Fault (Amber) Per port: Link/Active (Green), Speed/100 (Yellow), 10: Off PoE Port LED 1 LED /per Port : • PoE Output Power On : ON (Green) • PoE Fault (Over Load , Short Circuit, Port failed at Startup) : Flash 1 times /sec (Green) • PoE Output Power Off : Off (Green)
<b>Reverse Polarity Protection</b>	Present for Power Input

<b>Overload Current Protection</b>	Present
<b>Power Supply</b>	Redundant Dual DC 24/48V (20~57VDC) Input power
<b>PoE Power Output</b>	IEEE802.3at Per Port 30W maximum, regulated 55 VDC
<b>Power &amp; Alarm Connector</b>	8 Pin M12 Connector (Male)
<b>Alarm Relay Contact</b>	Relay outputs with current carrying capacity of 1 A @24VDC, Normal Close (NC)
<b>Operating Temperature</b>	-10°C~60°C (ITP-800-M12-4PH24) -40°C~75°C (ITP-800-M12-4PHE24)
<b>Operating Humidity</b>	5% to 95% (Non-condensing)
<b>Storage Temperature</b>	-40°C~85°C
<b>Housing</b>	Rugged Metal, IP40 Protection
<b>Installation Mounting</b>	DIN rail or wall mounting

Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.

## Specifications

<b>EMI</b>	FCC Part 15 Subpart B Class A
	CE, EN 55022 Class A
<b>EMS</b>	EN 61000-6-4 - Emission for industrial environment
	EN 61000-6-2 - Immunity for Industrial environment
	EN61000-4-2 (ESD) Level 3, Criteria B
	EN61000-4-3 (RS) Level 3, Criteria A
	EN61000-4-4 (Burst) Level 3, Criteria B
	EN61000-4-5 (Surge) Level 3, Criteria B
<b>Safety</b>	UL60950-1 (Pending)
	Rail Traffic EN50155

<b>Shock</b>	IEC 61373
<b>Freefall</b>	IEC 60068-2-32
<b>Vibration</b>	IEC 61373
<b>MTBF</b>	TBD (Above 30 years)
<b>Warranty</b>	5 years

## Application

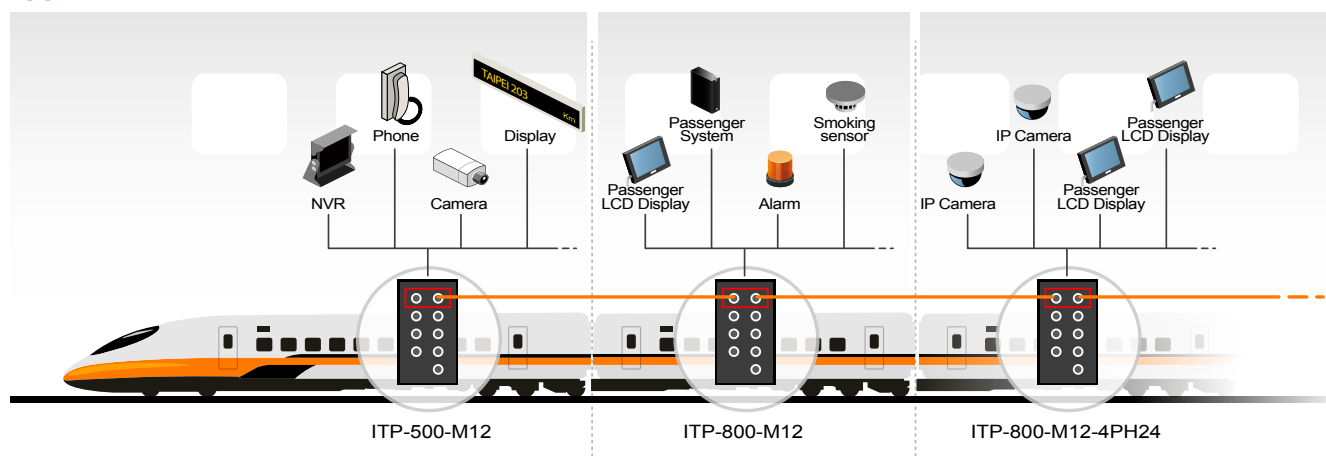


Figure : ITP Series in Railway Application

## Ordering Information

Model Name	Description
ITP-800-M12-4PH24	EN50155 8-Port 10/100Base-TX with M12 and 4x PoE+ Switch (24V Booster), -10°C~60°C
ITP-800-M12-4PHE24	EN50155 8-Port 10/100Base-TX with M12 and 4x PoE+ Switch (24V Booster), -40°C~75°C

### Accessories

DR-120-24	Industrial Power, Input 88 ~ 132VAC / 176 ~ 264VAC, Output 24VDC, 120W, -10 ~ +60°C
DRP-240-48	Industrial Power, Input 85 ~ 264VAC, Output 48VDC, 240W, -10 ~ +70°C

Temperature  
**ITP – 800 – M12 – 4PH  24**  
 Example: ITP – 800 – M12 – 4PHE24