NEW

ITP-500

EN50155 IP67 5x10/100Base–TX Ethernet Switch

ITP-800

EN50155 IP67 8x10/100Base–TX Ethernet Switch

The ITP-500 (ITP-800) Series non-managed Fast Ethernet switches provide 5(8)x 10/100Base-TX Fast Ethernet ports. This series of unmanaged Ethernet switches is designed for industrial applications in harsh environments. The ITP-500 (ITP-800) series switches Ethernet ports utilize M12 connectors to ensure tight, robust connections and guarantee reliable operation against environmental disturbances such as vibration and shock. The ITP-500 (ITP-800) series 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

- 8-Port 10/100Base-TX Ethernet Switch (ITP-800)
- 5-Port 10/100Base-TX Ethernet Switch (ITP-500)
- Use M12 connector anti vibration and shock for vehicle, rolling stock, and railway applications
- Supports flow control
- DIN rail or wall mounting installation
- Supports broadcast storm protection
- Supports auto-negotiation and auto-MDI/MDI-X
- Built in 2 bypass port (ITP-800)
- Redundant dual DC input power 12/24/48VDC (8.4~60VDC) (ITP-800)
- DC input power 12/24/48VDC (8.4~60VDC) (ITP-500)
- IP67 grade rugged housing for against water, dust, and oil
- Wide operating temperature -40~75°C (ITP-500-E, ITP-800-E)
- CE, FCC, EN50155 and EN50121-4 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
	IEEE802.3x Flow Control and Back Pressure
Switch Architecture	Back-plane (Switching Fabric): 1Gbps (ITP-500) Back-plane (Switching Fabric): 1.6Gbps (ITP-800)
Data Processing	Store and Forward
Flow Control	IEEE 802.3x flow control, back pressure flow control
Provides Broadcast Storm Protection	Present
MAC Address Table	1 K
Packet Buffer Size	448Kbits
Network Connector	5x M12 D-code Female (ITP-500)
	8x M12 D-code Female (ITP-800)
	10/100Base-TX auto negotiation speed
	Auto MDI/MDI-X function
	Full/Half duplex
	Built in 2 bypass port (ITP-800)
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) (ITP-800) Per unit: Power (Green) (ITP-500)
	Per port: Link/Active (Green)
Reverse Polarity Protection	Present for power input
Overload Current Protection	Present
Power Supply	Redundant Dual DC 12/24/48V (8.4~60VDC) Input power (ITP-800)
	DC 12/24/48V (8.4~60VDC) Input power (ITP-500)
Power	5 Pin Male A-Code M12
Power Consumption	

Input Voltage	ITP-500	ITP-800
12VDC	0.8W	1.8W
24VDC	1.0W	2.2W
48VDC	1.9W	3.4W

Operating Temperature	-10°C~60°C (ITP-500, ITP-800)
	-40°C~75°C (ITP-500-E, ITP-800-E)
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40°C~85°C
Housing	IP67 water-proof grade rugged housing, and fanless
Dimensions	43 x 30 x 206.5 mm (D x W x H) (ITP-500) 39 x 65.1 x 191.5 mm (D x W x H) (ITP-800)
Weigth	260g (ITP-500) 410g (ITP-800)
Installation Mounting	DIN rail or wall mounting
MTBF	309,668 Hours (ITP-500) 303,728 Hours (ITP-800) (MIL-HDBK-217)
Warranty	5 years
Certification	
EMC	CE
EMI	FCC, FCC Part 15 Subpart B Class A
	CE EN 55022 Class A
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 B
	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
	EN 61000-4-12
Safety	UL60950-1 (Pending)
Shock	IEC 61373
Freefall	IEC 60068-2-32
Vibration	IEC 61373

Application

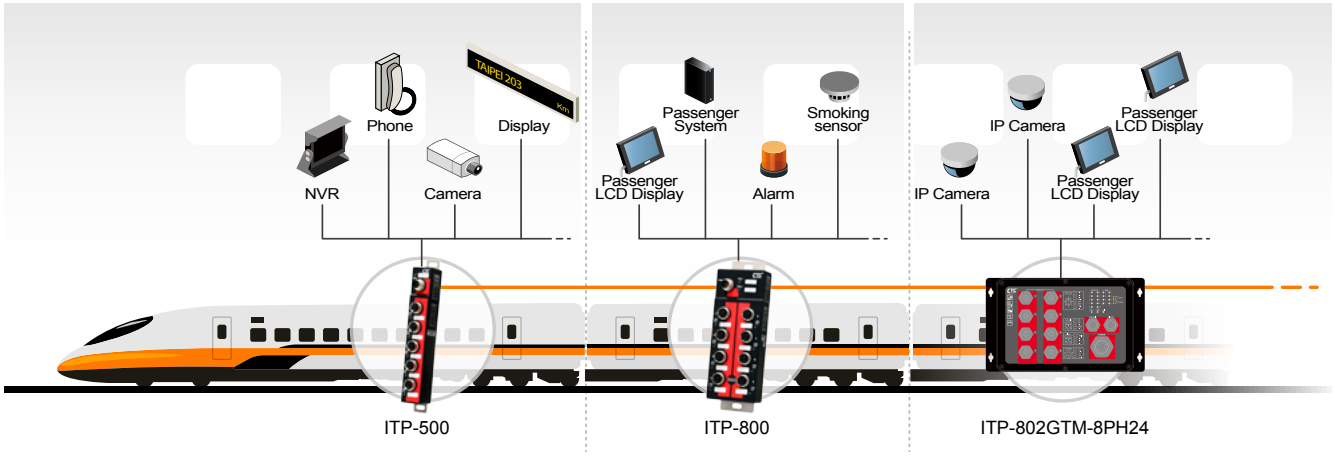


Figure 1 : ITP Series in Railway Application

Figure 2 : IP67 Protection

Figure 3 : Wide Range Temperature

Figure 4 : ITP Series for Industrial Automation

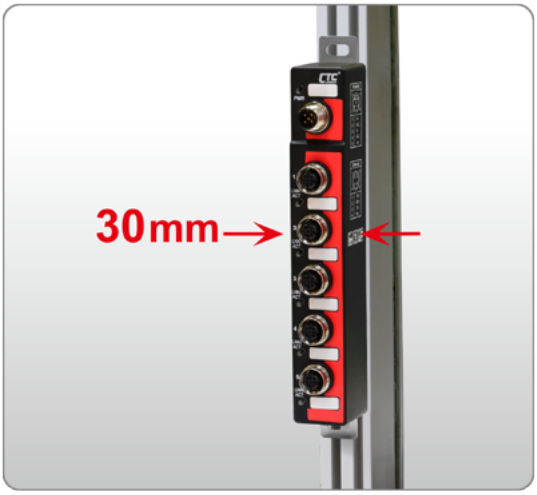
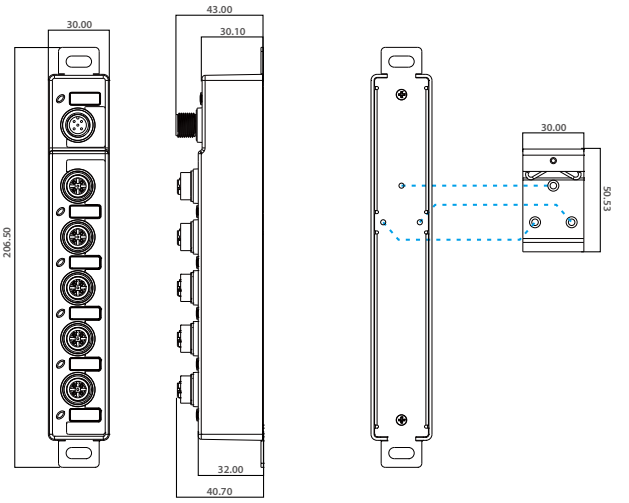


Figure 5 : Slim and Compact Size

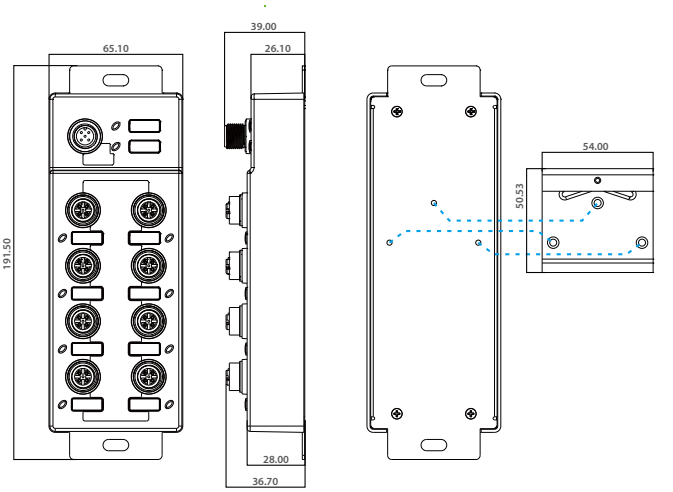
Dimensions

ITP-500



Side View Front View Rear View DIN-Rail Kit View

ITP-800

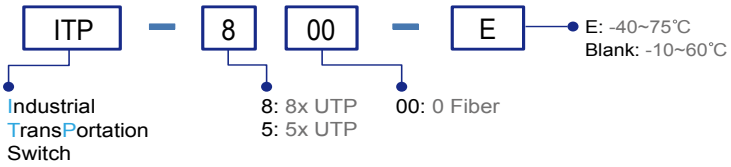


Side View Front View Rear View DIN-Rail Kit View

Ordering Information

Model Name	IP67	Total Port	UTP Port M12	Power Supply	Certification				Shock Vibration	Operating Temperture
			10/100 Base-TX	12/24/48VDC (8.4~60VDC)	EN50155	EN50121-4	EN61000-6-2 EN61000-6-4	CE FCC	IEC61373	
ITP-500	V	5	5	1	V	V	V	V	V	-10~60 C
ITP-500-E	V	5	5	1	V	V	V	V	V	-40~75 C
ITP-800	V	8	8	2	V	V	V	V	V	-10~60 C
ITP-800-E	V	8	8	2	V	V	V	V	V	-40~75 C

Model Naming Rule



Accessories

Power Supply

DR-4524	Industrial Power, Input 85 ~ 264VAC, Output 24VDC, 48W, -10 ~ +50°C
MDR-40-24	Industrial Power, Input 85 ~ 264VAC, Output 24VDC, 40W, -20 ~ +70°C

M12 Cable

IND-M12DM4-Cable
M12 D-code Male (4-Pin) to RJ-45 socket ,300cm cable, IP67

For UTP Port

IND-M12AF5-Cable
M12 A-code Female (5-Pin) +100cm cable , IP67

For Power

M12 Connector

IND-M12DM4-Connector
M12 D-code Male (4-Pin) connector, IP67

For UTP Port

IND-M12AF5-Connector
M12 A-code Female (5-Pin) connector, IP67

For Power