

TPS-141TX-M12



➔ **EN50155 5-port unmanaged PoE Ethernet switch with 4x10/100Base-T(X) P.S.E. and 1x10/100Base-T(X), M12 connector**

Features

- Supports 4 x 10/100 Base-T(X) with P.S.E. PoE ports, Plus 1 x 10/100 Base-T(X)
- 4 **P.S.E.** ports that are fully compliant with IEEE802.3at standard, with each port providing up to 30 Watts per port
- Supports auto-negotiation and auto-MDI/MDI-X
- Supports store and forward transmission
- Supports flow control
- Supports broadcast storm protection
- Ultra-rugged enclosure M12 connector for toughest industrial usages
- Wall mounting enabled

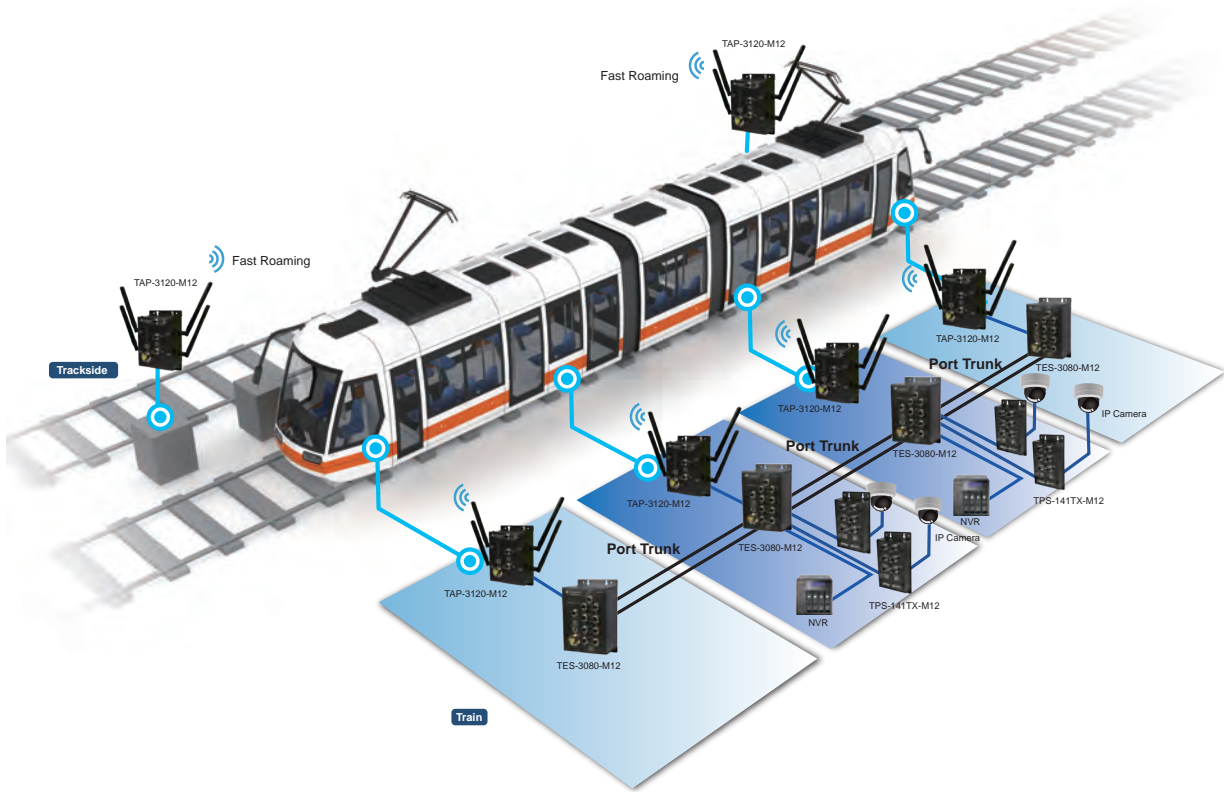


Introduction

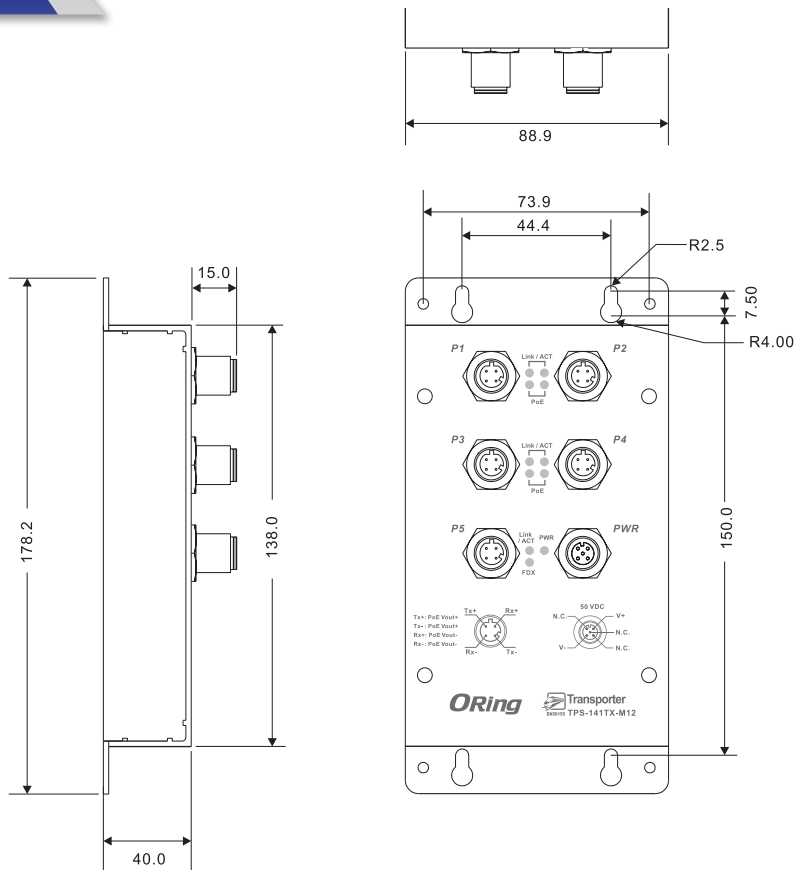
ORing's Transporter series Ethernet switches are designed for industrial applications, such as rolling stock, vehicle, and railway applications. TPS-141TX-M12 is unmanaged PoE Ethernet switch with 4x10/100Base-T(X) P.S.E. ports and 1x10/100Base-T(X) port which is compliant with EN50155 requirement. It is specifically designed for the toughest industrial environments. TPS-141TX-M12 EN50155 Ethernet switch use M12 connectors to ensure tight, robust connections, and guarantee reliable operation against environmental disturbances, such as vibration and shock. TPS-141TX-M12 also support Power over Ethernet, a system to transmit electrical power up to **30 watts**, along with data, to remote devices over standard twisted-pair cable in an Ethernet network. Each TPS-141TX-M12 switch has 4x10/100Base-T(X) P.S.E. (Power Sourcing Equipment) port to provide power in a PoE setup. The very wide operating temperature range from -40 ~ 70°C can satisfy most operating environment.

Practical Operation

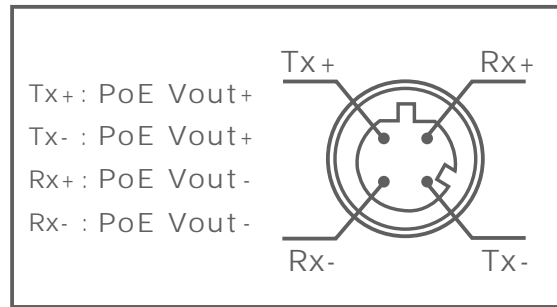
TPS-141TX-M12 can be used in connecting several Ethernet devices which need to operated under harsh environment requirement. The designs of rugged housing and wide operating temperature range from -40 ~ 70°C, makes TPS-141TX-M12 reliably in any kinds of transporter applications..



Dimensions



PoE Pin Definition



Specifications

ORing Switch Model	TPS-141TX-M12
Physical Ports	
10/100 Base-T(X) with P.S.E. Ports in M12 Auto MDI/MDIX	4 x M12 connector (4-pin M12 D-coding)
10/100 Base-T(X) Port in M12 Auto MDI/MDIX	1 x M12 connector (4-pin M12 D-coding)
Technology	
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3x for Flow control IEEE 802.3at PoE specification (up to 30 Watts per port for P.S.E.)
Processing	Store-and-Forward
LED Indicators	
Power Indicator	Green : Power LED x 1
10/100Base-T(X) M12 port with P.S.E. indicator	Green for port Link/Act. Blue for PoE indicator
10/100Base-T(X) M12 port indicator	Green for port Link/Act. Amber for port Duplex/Collision
Power	
Input Power	50 ~ 57 VDC voltage power input in M12 connector (5-pin M12 A-coding)
Power Consumption (Typ.)	3 Watts (PoE outputs not included)
Overload Current Protection	Present
Reverse Polarity Protection	Not Present
Physical Characteristics	
Enclosure	IP-40
Dimensions (W x D x H)	88.9 (W) x 40 (D) x 178.2 (H)mm(3.5 x 1.57 x 7 inch)
Weight (g)	363 g
Environmental	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-40 to 70°C (-40 to 158°F)
Operating Humidity	5% to 95% Non-condensing

Regulatory Approvals	
EMI	FCC Part 15, CISPR (EN55022) class A, EN50155 (EN50121-3-2, EN55011, EN50121-4)
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
Shock	IEC60068-2-27, EN61373
Free Fall	IEC60068-2-32
Vibration	IEC60068-2-6, EN61373
Safety	EN60950-1
Warranty	5 years

Ordering Information

TPS-1 **A** **B** TX -M12

Code Definition	10/100Base-T(X) P.S.E. Port Number	Additional Port Number with 10/100Base-T(X)
Option	- 4 : 4 ports	- 1 : 1 port

	Model Name	Description
Available Model	TPS-141TX-M12	EN50155 5-port unmanaged PoE Ethernet switch with 4x10/100Base-T(X) P.S.E. and 1x10/100Base-T(X), M12 connector

Packing List

- TPS-141TX-M12 x 1
- Quick Installation Guide

Optional Accessories

- DR-75 series : 75 Watts DIN-Rail power supply
- DR-120 series : 120 Watts DIN-Rail power supply
- SDR-240-48, 240W DIN-Rail power supply
- SDR-480-48, 480W DIN-Rail power supply
- M12 cables series