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
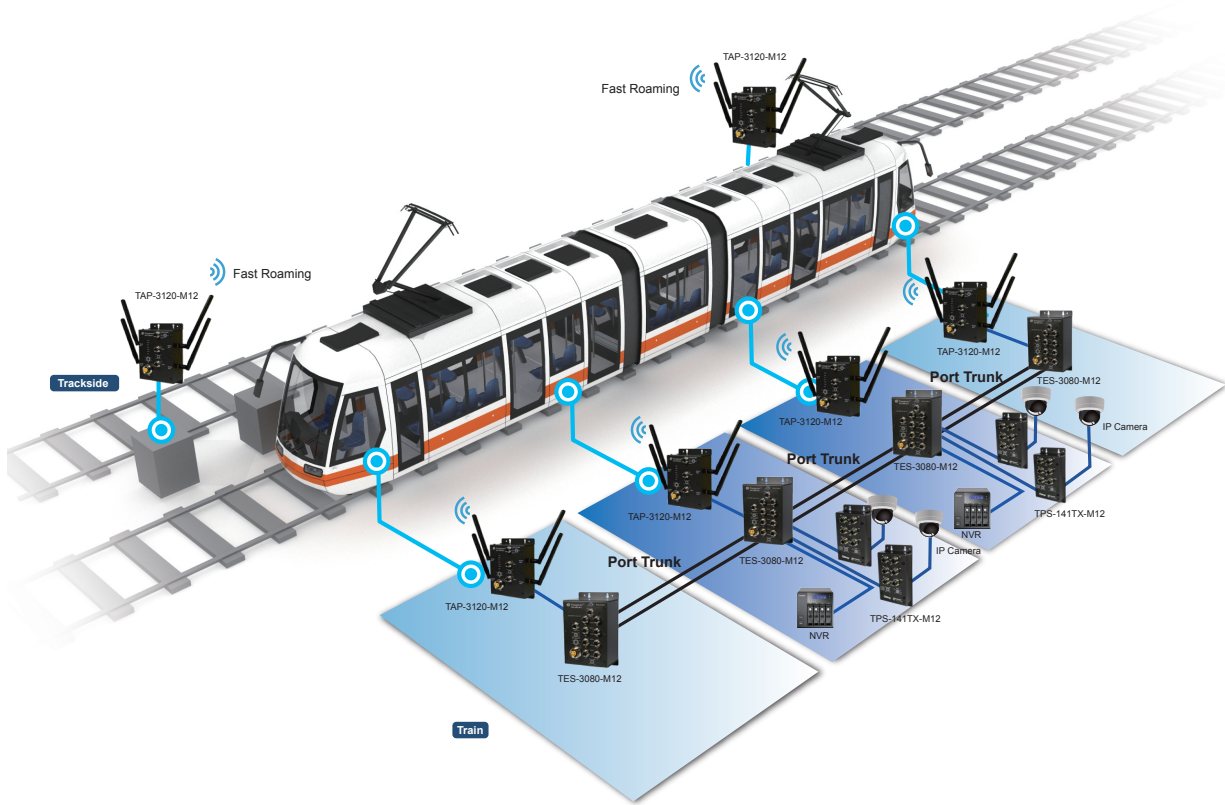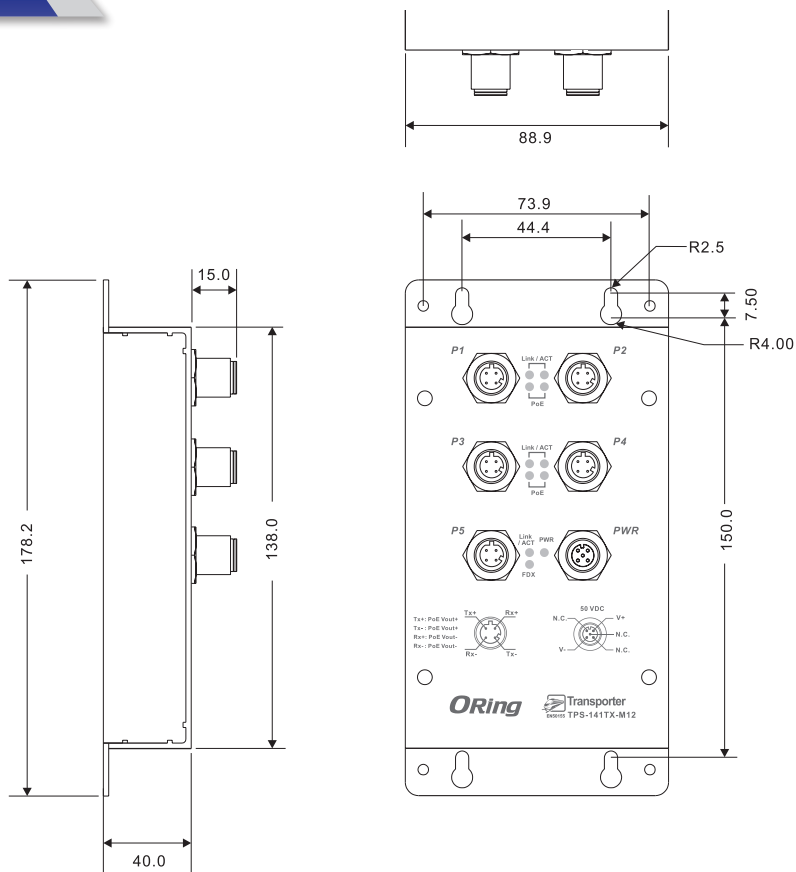- Wall mounting enabled

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℃ can satisfy most operating environment.
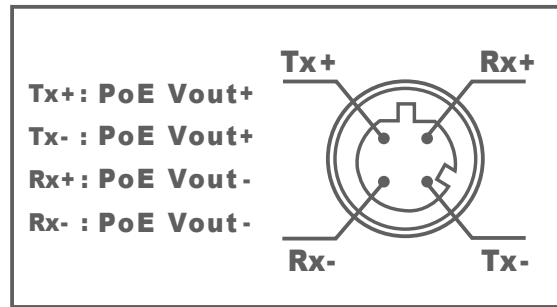
Practical Operation

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℃, makes TPS-141TX-M12 reliably in any kinds of transporter applications..

Industrial Ethernet Switch

Industrial Media Converter

Industrial Device Server

Industrial Wireless Access Point

Industrial Cellular VPN Router

Accessories

Network Management Software

Dimensions

PoE Pin Definition

Tx+ : PoE Vout+
Tx- : PoE Vout+
Rx+ : PoE Vout -
Rx- : PoE Vout -

Tx+   Rx+

Rx-   Tx-

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℃ (-40 to 185℉)
Operating Temperature	-40 to 70℃ (-40 to 158℉)
Operating Humidity	5% to 95% Non-condensing

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Ethernet Switch

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Management Software

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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