TXPS-141XT-M12 Series

EN50155 5-port unmanaged PoE Ethernet switch with 4x10/100/500Base-T(X) P.S.E. and 1x10/100/500Base-T(X), M12 connector

Features

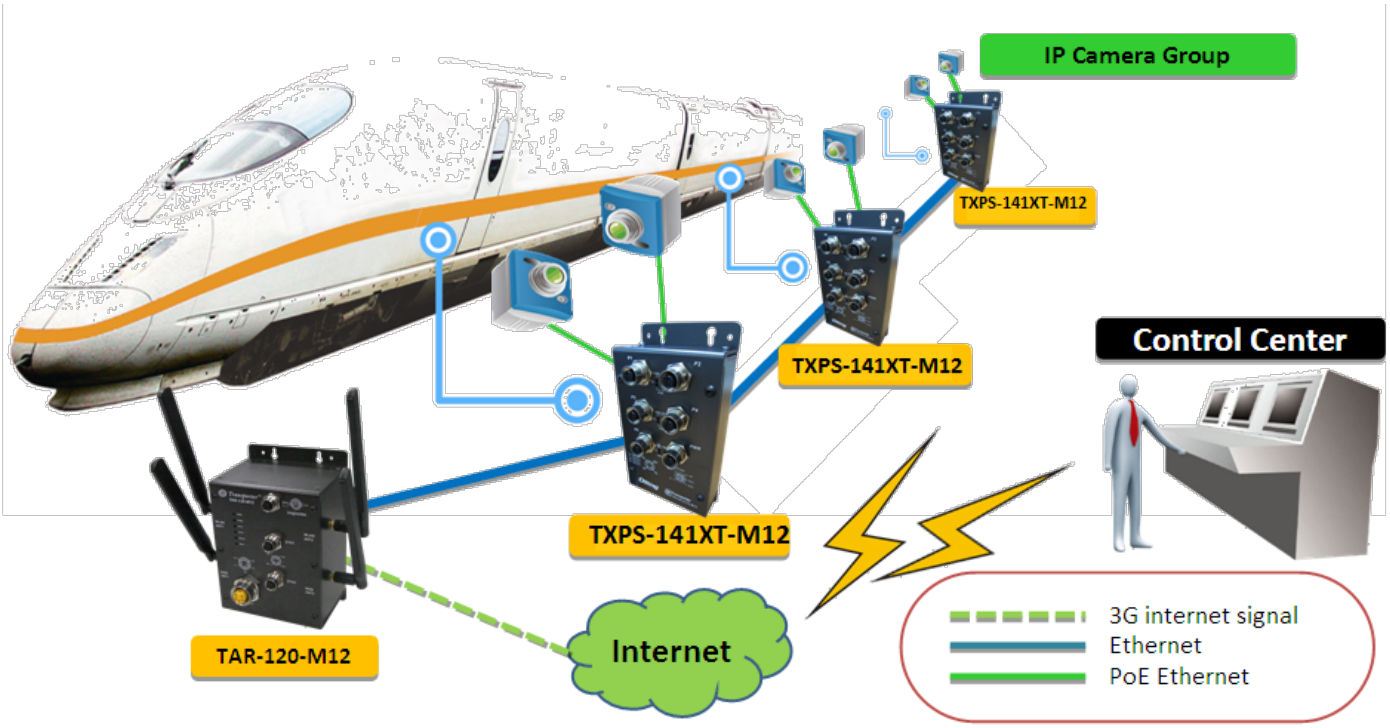
- Supports 4 x 10/100/500 Base-T(X) with P.S.E. PoE ports
- 4 port **P.S.E.** fully compliant with IEEE802.3at standard, provide up to 30 Watts per port
- Support auto-negotiation and auto-MDI/MDI-X
- Support store and forward transmission
- Support flow control
- Support broadcast storm protection
- 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. TXPS-141XT-M12 series are unmanaged PoE Ethernet switch with 4x10/100/500Base-T(X) P.S.E. ports and 1x10/100/500Base-T(X) port which is compliant with EN50155 requirement. It is specifically designed for the toughest industrial environments. TXPS-141XT-M12 series EN50155 Ethernet switch use M12 connectors to ensure tight, robust connections, and guarantee reliable operation against environmental disturbances, such as vibration and shock. TXPS-141XT-M12 series 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. TXPS-141XT-M12 series switch has 4x10/100/500Base-T(X) P.S.E. (Power Sourcing Equipment) port to provide power in a PoE setup. The very wide operating temperature range from -40 ºC to 75ºC can satisfy most operating environment.

Practical Operation

TXPS-141XT-M12 series 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 ~ 75ºC, makes TXPS-141XT-M12 series reliably in any kinds of transporter applications.



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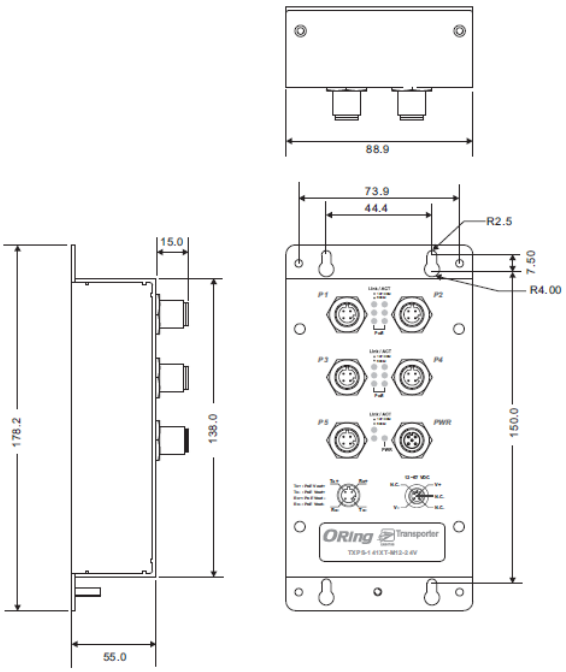
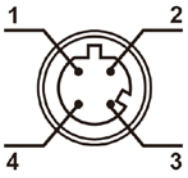
Dimension

Dimension (Unit =mm)



Pin Definition



D-Coding M12

10/100Base-T(X) P.S.E. M12 port	
Pin No.	Description
#1	Tx+ with PoE Vout+
#2	Rx+ with PoE Vout-
#3	Tx- with PoE Vout+
#4	Rx- with PoE Vout-

Specifications

ORing Switch Model	TXPS-141XT-M12-24V	TXPS-141XT-M12-MV
Physical Ports		
10/100/500Base-T(X) with P.S.E. Ports in M12 Auto MDI/MDIX	**4 x M12 female connector (4-pin M12 D-coding)**	
10/100/500Base-T(X) Port in M12 Auto MDI/MDIX	**1 x M12 female 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	
10/100/500Base-T(X) M12 port with P.S.E. indicator	Top Green for port Link/Act at 10/100Mbps Middle Green for port Link/Act at 500Mbps Bottom Blue for PoE indicator	
10/100/500Base-T(X) M12 port indicator	Top Green for port Link/Act at 10/100Mbps Bottom Green for port Link/Act at 500Mbps	
Power		
Input Power	12~57VDC power input on M12 connector (5-pin M12 A-coding)	72~110VDC power input on M12 connector (5-pin M12 A-coding)
Power Consumption (Typ.)	2 Watts	5 Watts
PoE Output Power	60 Watts (12~24VDC) / 120 Watts (24~57VDC)	60 Watts
Overload Current Protection	Present	
Reverse Polarity Protection	Present	
Physical Characteristic		
Enclosure	IP-30	IP-40
Dimension (W x D x H)	88.9 x 55 x 178.2 mm	
Weight (g)	643 g	771 g
Environmental		
Storage Temperature	-40 to 85°C (-40 to 185°F)	
Operating Temperature	-40 to 75°C (-40 to 167°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)	