



ORing WEB-site

TINJ-101-M12-24V

➤ **EN50155 Industrial 1-port FET PoE Injector with 30W output, 24VDC Input, M12 connector**

Features

- Supports 1x10/100Base-T(X) for power and data output
- Fully compliant with IEEE 802.3at/af
- Auto protection for over voltage power input and over current output
- Supports power output up to 30Watts
- Supports power input range from 12 to 57VDC
- Ultra-rugged enclosure M12 connector for toughest industrial usages
- Wall mounting enabled

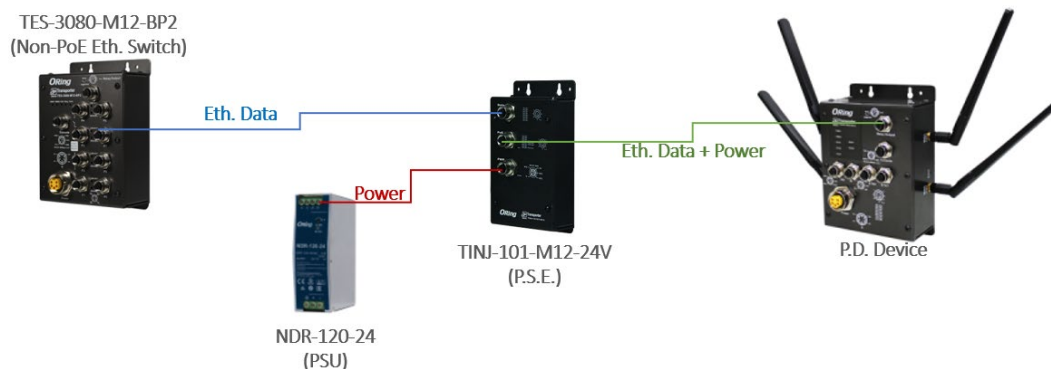


Introduction

ORing's Transporter™ series PoE Injectors are designed for industrial applications, such as rolling stock, vehicle, and railway applications. The TINJ-101-M12-24V PoE Injector is an advanced IEEE802.3at compliant device with Intelligent Detection that provided 1-port 10/100 Base-T(X) PoE output which is compliant with EN50155 requirement. It is specifically designed for the toughest industrial environments. TINJ-101-M12-24V EN50155 PoE Injector use M12 connectors to ensure tight, robust connections, and guarantee reliable operation against environmental disturbances, such as vibration and shock. The device does not turn on power until it detects a valid PoE signature from the PoE devices attached downstream on the Ethernet cable. This protection against damage to non-PoE compliant equipment which may be connected to the Ethernet cable. Because of this intelligent detection, only an IEEE 802.3at/802.3af compliant device can be powered with the TINJ-101-M12-24V PoE Injector. Typically, in Ethernet networks the maximum allowable CAT5 cable length is about 100 meters, due to the limitation of the Ethernet standards. Because of its 50V insertion, the installer doesn't need to worry about voltage drops caused by cable length. The TINJ-101-M12-24V PoE Injector can function with any PoE P.D. equipment which is fully compliant with the IEEE 802.3at/802.3af PoE standards.

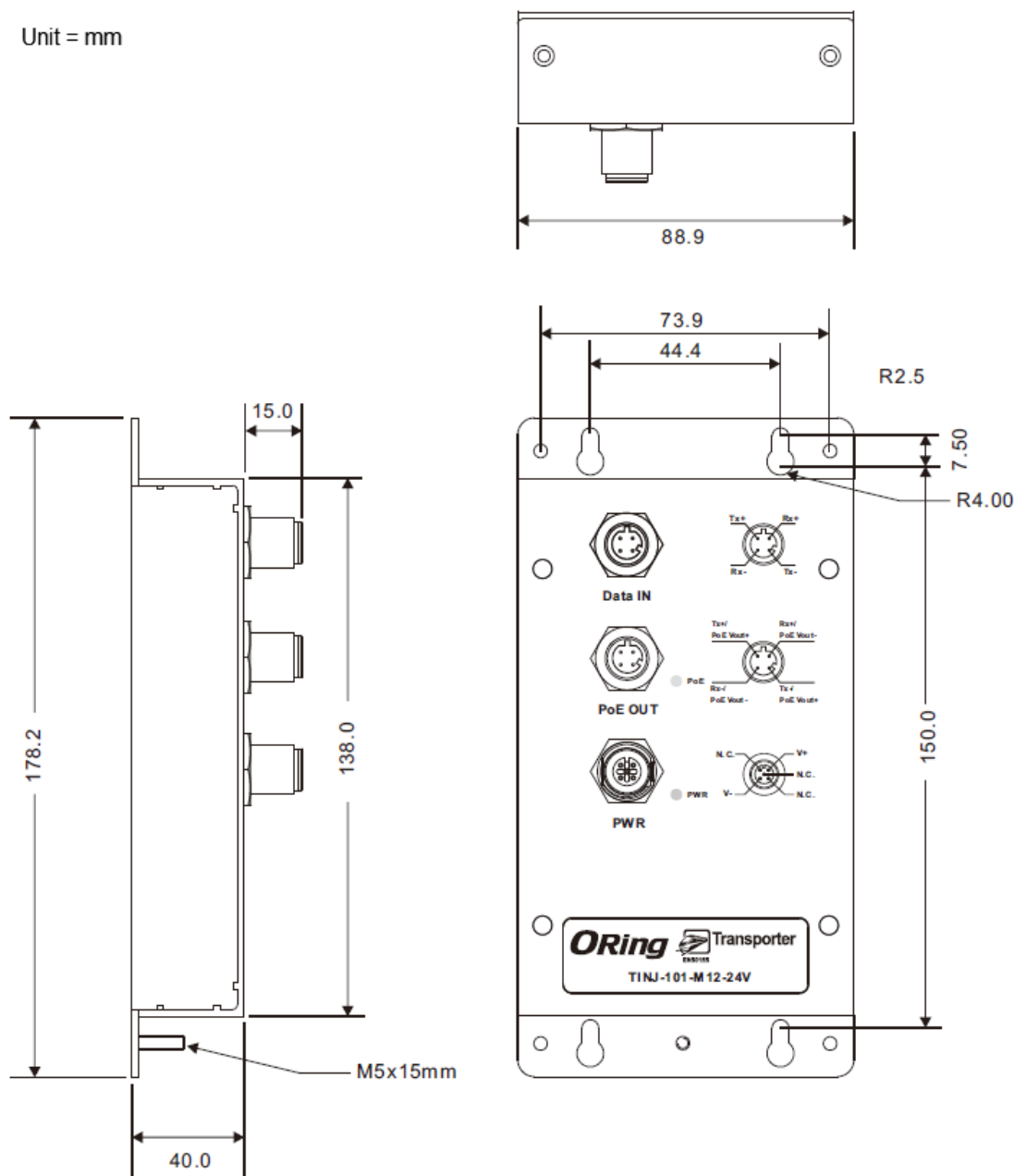
Note: The equipment being powered must be fully IEEE 802.3at/802.3af compliant in order for the power supply to be able to sense the PoE devices signature and apply power. Power is supplied on Ethernet pins 2/4 (V+) and 1/3 (V-).

Connection

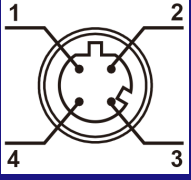


Dimensions

Unit = mm



Pin Definition

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

Note: pins 1 and 3 (-Vdc) should not be shorted to ground.

Specifications

ORing Switch Model	TINJ-101-M12-24V
Physical Ports	
10/100Base-T(X) with P.S.E. Ports in M12 Auto MDI/MDIX	1 (4-pin female D-coding)
10/100Base-T(X) Ports in M12 Auto MDI/MDIX	1 (4-pin female D-coding)
LED Indicators	
Power Indicator (PWR)	Power / Ready: Green LED x 1 Green On: Power is on and functioning Normally.
PoE Indicator (PoE)	1 x LED Blue On: PoE Device Link Blue Blinking: Detecting PoE Device Blue Off: None PoE Device Detected
Power	
Input Power	Railway 24VDC (12 ~ 57VDC) on 5-pin female A-coding connector
PoE Output Power	IEEE 802.3af: 15.4 Watts / IEEE 802.3at: 30 Watts Max.
Short Circuit Protection	Present
Overload Load Protection	Present
Physical Characteristic	
Enclosure	IP-40
Dimension (W x D x H)	88.9 (W) x 40 (D) x 178.2 (H) mm 3.5 (W) x 1.57 (D) x 7.02 (H) inch
Weight (g)	446 g
Environmental	
Storage Temperature	-40 to 80°C (-40 to 176°F)
Operating Temperature	-25 to 75°C (-13 to 167°F)
Operating Humidity	5% to 90% Non-condensing
Regulatory Approvals	
EMC	CE EMC (EN 55035, EN 55032), FCC Part 15 B, EN 50155(EN 50121-1, EN 50121-3-2)
EMI	EN 55032, CISPR32, EN 61000-3-2, EN 61000-3-3, FCC Part 15 B class A
EMS	EN 55035 IEC/EN 61000-4-2 (ESD), IEC/EN 61000-4-3 (RS), IEC/EN 61000-4-4 (EFT), IEC/EN 61000-4-5 (Surge), IEC/EN 61000-4-6 (CS), IEC/EN 61000-4-8(PFMF), IEC/EN 61000-4-11 (DIP)
Shock	IEC60068-2-27
Free Fall	IEC60068-2-31
Vibration	IEC60068-2-6
Safety	EN 62368-1
Other	EN 50155
MTBF	3,513,152 hrs
Warranty	5 years

*NOTE: This function is available by request only

Ordering Information

TINJ-10A-M12-BBB



Code Definition	10/100Base-T(X) P.S.E. Port Number	Power Input
Option	- 1: 1 port	- 24V: 12 ~ 57VDC

Available Model	Model Name	Description
	TINJ-101-M12-24V	EN50155 Industrial 1-port FET PoE Injector with 30W output, 24VDC Input, M12 connector

Packing List <ul style="list-style-type: none"> TINJ-101-M12-24Vx 1 Quick Installation Guide x 1 	Optional Accessories <ul style="list-style-type: none"> M12 cable series
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