User Manual

 $\label{eq:localization} Industrial \ Gigabit \ Injector \ with \ Voltage \ Booster \\ 1 \times 10/100/1000M \ TX, 30W \ PSE + 1 \times 10/100/1000M \ TX, 12-56 \ VDC \ input$

FCC MARKING

This Equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received; including interference that may cause undesired operation.

CE MARKING

This equipment complies with the requirements relating to electromagnetic compatibility, EN 55032/35 class A for ITE, the essential protection requirement of Council Directive 2014/30/EU on the approximation of the laws of the Member States relating to electromagnetic compatibility.

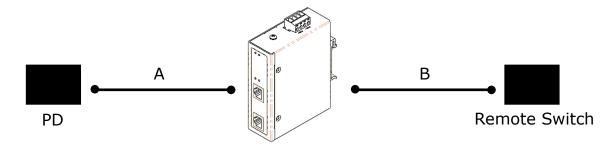
Company has an on-going policy of upgrading its products and it may be possible that information in this document is not up-to-date. Please check with your local distributors for the latest information. No part of this document can be copied or reproduced in any form without written consent from the company.

Trademarks:

All trade names and trademarks are the properties of their respective companies.

NOTE

Always make sure the total length of the TX cable DOES NOT exceed 100meter. Total length is defined as length A + length B



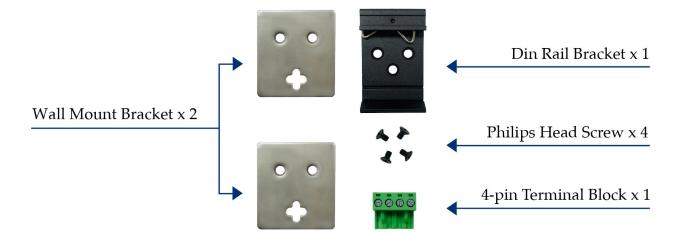
Length A + Length B < 100 meters

PoE signal attenuates every meter, the built-in transformer allows the attenuation to reach 100 meters to follow IEEE 802.3af/at standards. The higher quality PD you connect to, the more reliable the network will be. When connecting to a poor-quality PD, it cannot generate a strong enough signal for the remote switch. Always make sure you have a high-quality PD to perform your desired network.

Introduction

This rugged designed industrial PoE injector is equipped with a 30W PSE Port. This PSE port can be powered by 12-56VDC input voltage. With its multi-purpose design, it can also be Din-Rail-mounted or wall-mounted. It is an ideal unit for Mobile Base Station (BTS), IP surveillance, traffic monitoring and security applications in critical environments. It can tolerate -40°C to 75°C in harsh environments to perform a reliable network. This product has been rigorously tested in harsh environments for your security, transportation, and telco applications.

Installation package



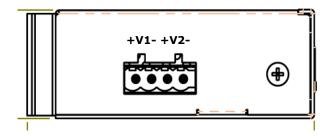
Power connection

This unit provides a 4 pin terminal block. It can be operated using 12-56VDC power source. Always make sure your input voltage is within this supported voltage range.

To connect power: This unit supports two power inputs. Follow the printed polarity for +V1-, +V2- and ground. Connect positive wires to V+, connect negative wires to V-, and connect a neutral wire to the ground screw.

- **+V1-** is for power input one connection.
- **+V2-** is for power input two connection.

Power connecting procedure:



STEP 1 – Take out 4 pin terminal block located in the included mounting kit package.

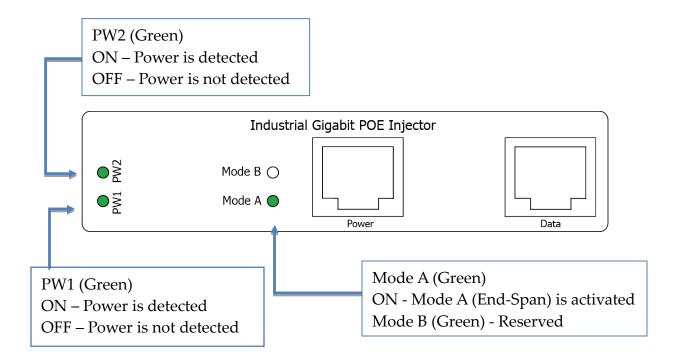
STEP 2 – Connect power wires to +V1- or +V2-with corresponding polarity. Connect the grounding wire to the ground screw.

STEP 3 – Plug into terminal block socket shown above. Polarity needs to match V+ and V-.

WARNING -- Always SHUT OFF power source to connect power wire.

<u>WARNING</u> -- Any exceeded input voltage will not make this unit function and may damage this unit.

LED indicator

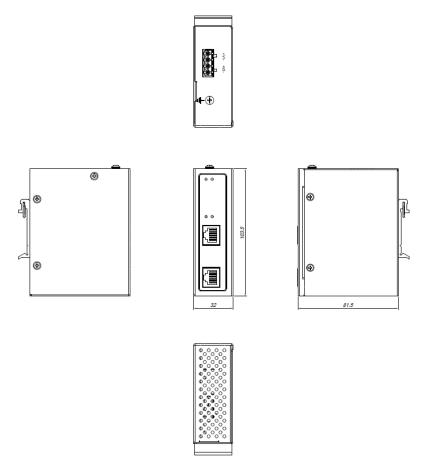


Specifications

IEEE Standard	IEEE 802.3 10Base-T Ethernet
	IEEE 802.3u 100Base-TX Fast Ethernet
	IEEE 802.3ab 1000Base-T Gigabit Ethernet
	IEEE 802.3af PoE
	IEEE 802.3at PoE+
Network Connector	1xRJ-45 10/100/1000BaseT(X) Data
	1xRJ-45 10/100/1000BaseT(X) Data with PoE output
	power
Network Cable	UTP/STP Cat.5e or above Cable
	EIA/TIA-568 (100m)
Protocol	CSMA/CD
LED	PW1 (Green): ON – Power is detected
	PW2 (Green): ON – Power is detected
	Mode A (Green): For End-Span PoE power 1,2,3,6
	Mode B (Green): Reserved
PoE Pin Assignment	Default: Mode A for Pin 1 (V+), 2 (V+), 3 (V-), 6 (V-)
Reverse Polarity Protection	Present
Overload current protection	Present
Power Supply	Redundant Dual DC 12V-56V power input
Power Consumption	1 W@48 VDC full load, Without PoE
PoE power	Maximum PoE power 36watts
Removable Terminal Block	Provide 4 pin terminal block
	Wire range: 0.34mm ² to 2.5mm ²
	Solid wire (AWG):12-24/14-22
	Stranded wire (AWG): 12-24/14-22
	Torque:5lb-In/0.5Nm/0.56Nm
	Wire Strip length: 7-8mm
Operating Temperature	-40°C to 75°C
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40°C to 85°C
MTBF (mean time between failure)	600,393.91 hrs (Telcordia (Bellcore), GB) at 50°C
Housing	Rugged Aluminum, IP30 Protection
Case Dimension (L X W X D)	103.5 x 32 x 81.5 mm (L x W x D)
Installation	DIN Rail and Wall Mount options included

Certifications	
Safety	LVD(EN62368-1)
Safety	UL 60950-1
EMC	CE (EN 55032/35), FCC,
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 6KV; Air: 8KV IEC 61000-4-4 EFT: Power: 2KV; Signal: 2KV IEC 61000-4-5 Surge: Power: 2KV; Signal: 2KV
Vibration	EN 60068-2-6
Shock	EN 60068-2-27
Free Fall	EN 60068-2-32

Housing Dimension (mm)



NOTE:

Housing dimension is for purpose of showing product Length, Width, Height, din-rail, and terminal block's position and dimension. Please reference the LED Indicator Page for correct port order.