

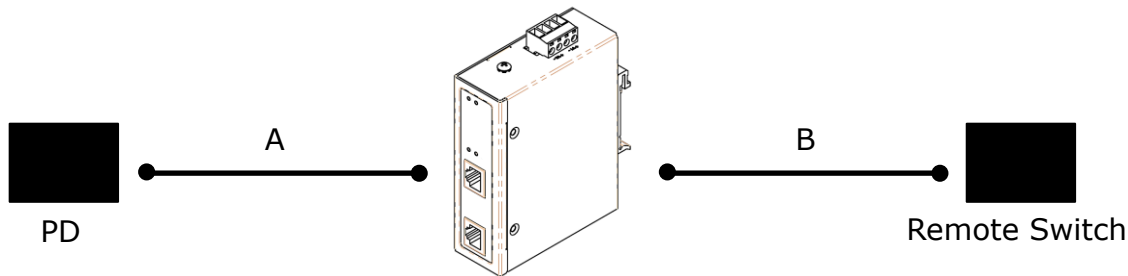


User Manual: PC-INJ-60W-B Industrial Injector with PoE++

Version 3.2020

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

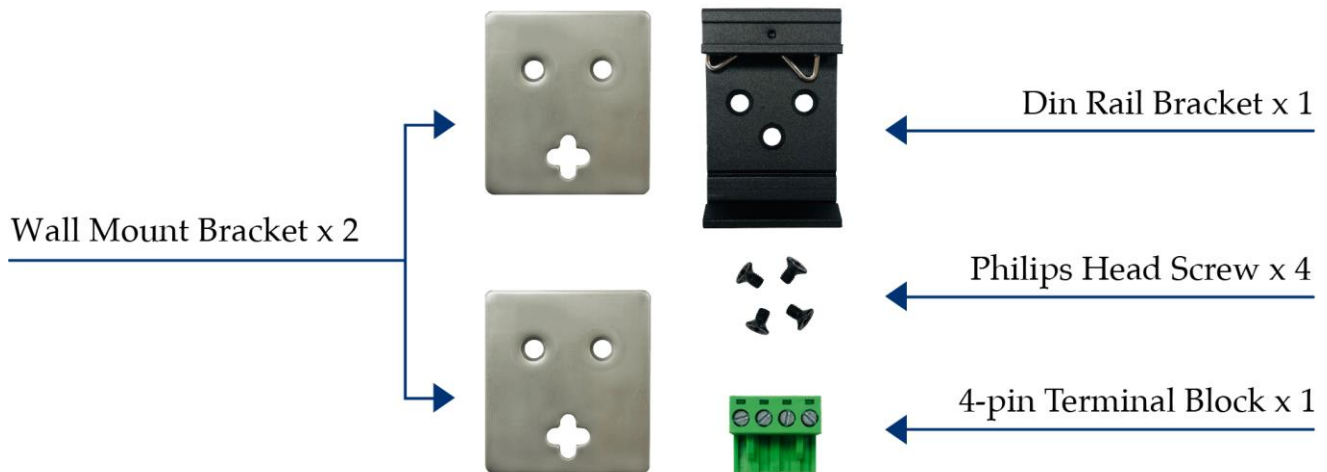
POE signal attenuates every meter, the built-in transformer allows the attenuation to reach 100 meters to follow IEEE 802.3af/at standards. The higher quality PD you connect to, the more reliable the network will be. When connecting to a poor-quality PD, it cannot generate a strong enough signal for 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 60W PSE Port. This PSE port can be powered by 24-56 VDC for 60W input voltage. With its multi-purpose design, it can also be Din-Rail 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

This unit can be din-rail mounted or wall-mounted. Din-rail brackets and wall-mounted brackets are included.



Power connection

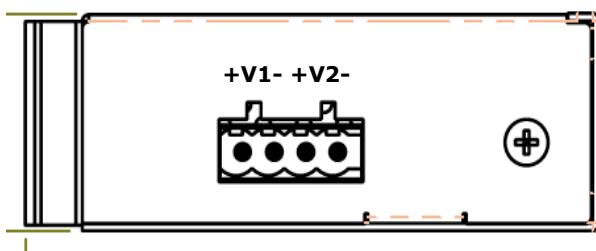
This unit provides a 4 pin terminal block. It can be operated using 24-56VDC power source. Always make sure your input voltage is within this supported voltage range.

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.

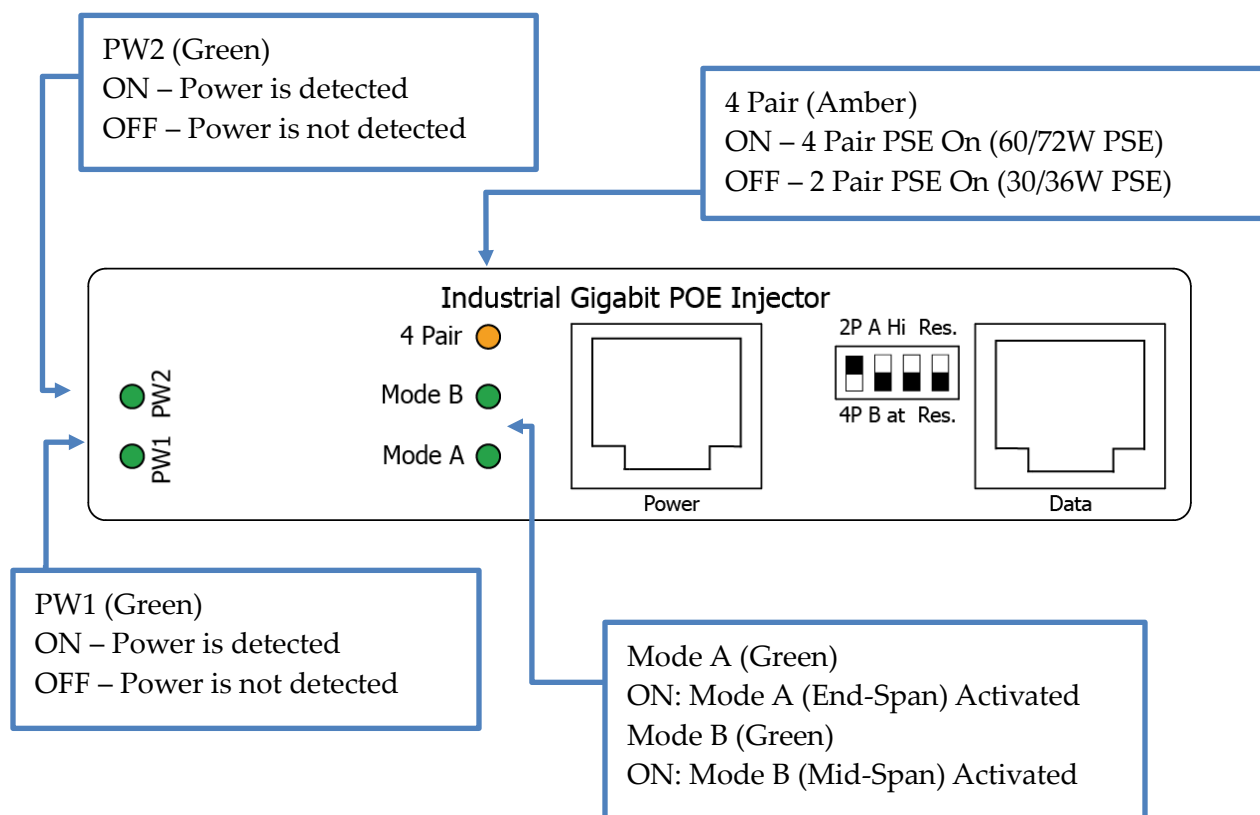
STEP 2 – Connect power wires to +V1- or +V2- with corresponding polarity. Connect the grounding wire to the ground screw.

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.

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

LED indicator



Dip Switch Function

This unit is equipped with 4 pin Dip-Switch located on the front panel. Adjust the Dip-Switch setting will change the default function of this unit.

Table shown as below is the features of these Dip-Switch function. You may change the Dip-Switch setting to your desired environment.



DIP 1	2P	2 Pair (30/36Watts)
	4P	4 Pair (60/72Watts) (default)
DIP 2	A	Mode A End-Span (default)
	B	Mode B Mid-Span
DIP 3	Hi	High power 36W (default)
	at	IEEE802.3at 30W
DIP 4	Reserved	

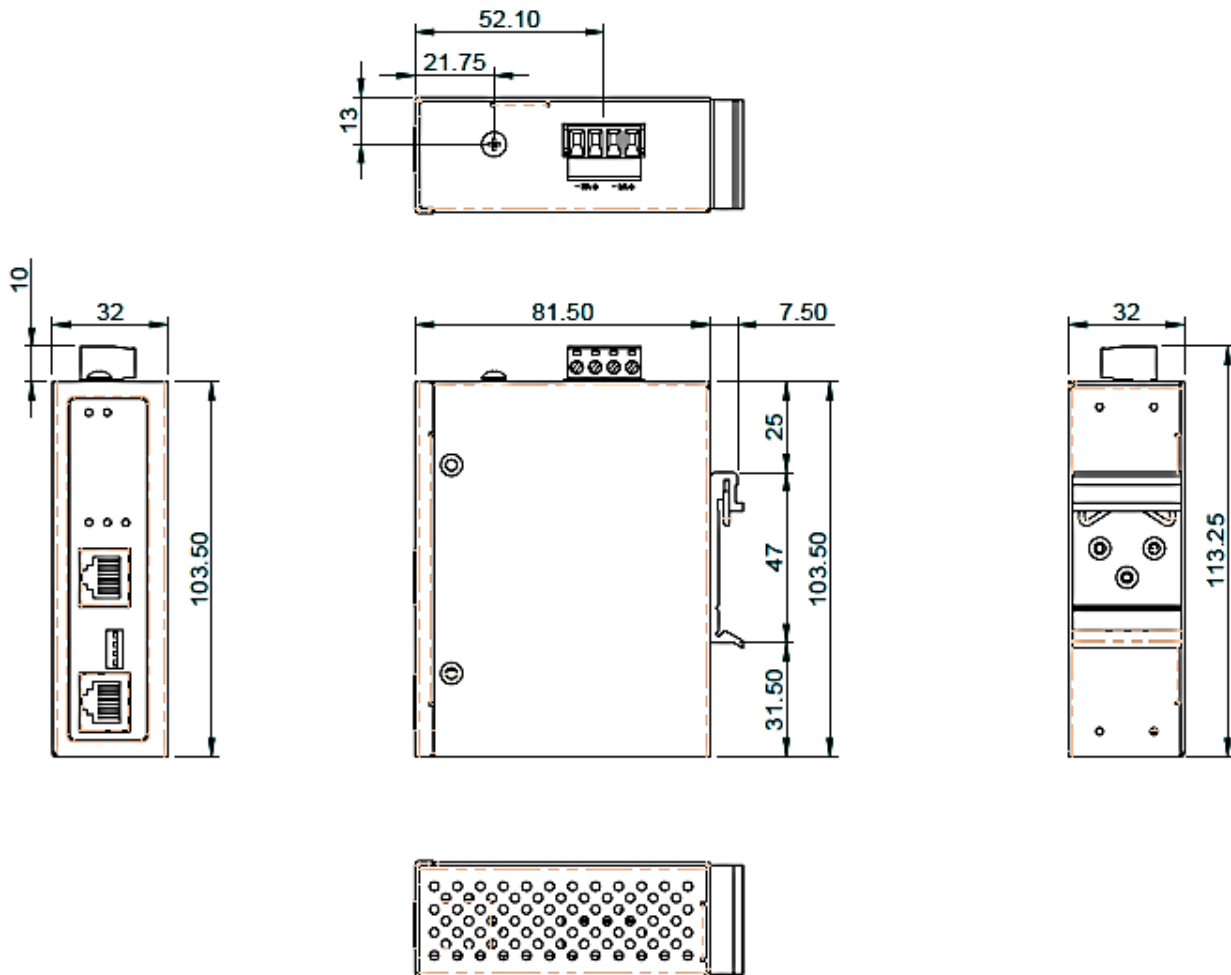
Specifications

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 for POE IEEE 802.3at for 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 above Cat.5e Cable EIA/TIA-568 10-ohm (100m)
Protocol	CSMA/CD
LED	PW1 (Green): ON – Power is detected PW2 (Green): ON – Power is detected Mode A (Green): ON – End Span PD detected Mode B (Green): ON – Mid Span PD detected 4 Pair (Amber): ON – 60W PSE is in active mode OFF – 30W PSE is in active mode
POE Pin Assignment	Default: Mode A for Pin 1 (V-), 2 (V-), 3 (V+), 6 (V+) Mode B for Pin 4 (V+), 5 (V+), 7 (V-), 8 (V-) DIP switch setting can be changed to Mode B (Mid-Span), V+, V+, V-, V- for pin 4, 5, 7, 8
Reverse polarity protection	Present
Overload current protection	Present
Power Supply	Redundant Dual DC 24V-56V power input
Power Consumption	1 W@24/48 VDC full load, Without POE
POE power	Max total PoE power 36/72/95watts at 56VDC input
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)	>500,000 hrs (MIL-HDBK-217F) at 25°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 mounting	DIN Rail and Wall Mount options included

Certifications

Safety	UL 60950-1
Safety	IEC EN60950-1
EMC/EMS	CE, FCC, EN55032/24, VCCI
EMI	FCC Part 15 Subpart B Class A
EN 60068-2-6	Vibration
EN 60068-2-27	Shock
EN 60068-2-32	Free Fall

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.