User Manual: PC-INJ-95-BT
Industrial PoE Injector

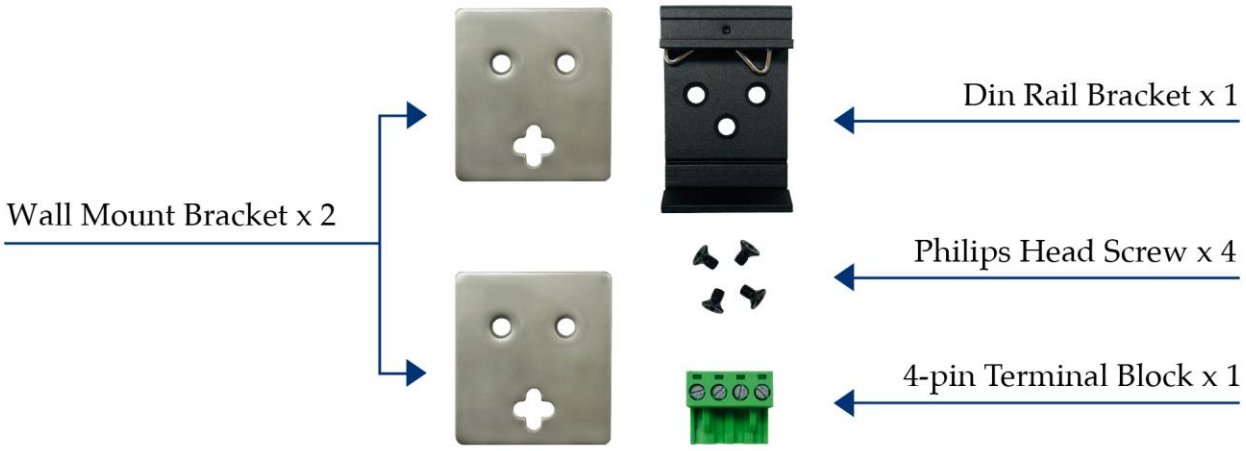
Version 7.2020

Introduction

This ultrahigh power hardened multi-Gig PoE Injector is equipped with one IEEE 802.3af/at/bt 90W 10G PSE port to power up 90Watts PD device for camera, WiFi AP, or LoRa applications. This high power bt device is also backward compatible with both 95W PoH and 60W uPoE to be used as a general usage high power PoE product. This means that this unit can be used as a general purpose solution for many high power PoE applications. This unit is designed for high-power broadband WIFI, 802.3bt devices, and a broad range of applications where 1G network speeds are insufficient. This unit is designed for IP surveillance, traffic monitoring, outdoor camera and for a broad range of applications. It can tolerate -40°C to +75°C in harsh environment to perform a reliable network.

Installation package

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



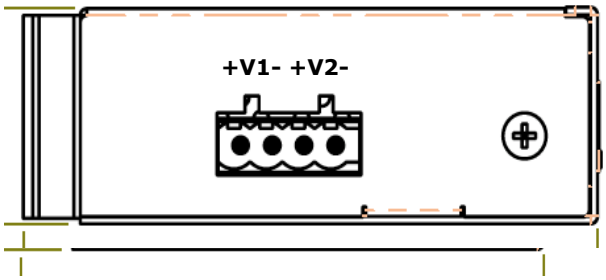
Power connection

This unit provides a 4 pin terminal block. It can be operated using 52-56VDC 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.

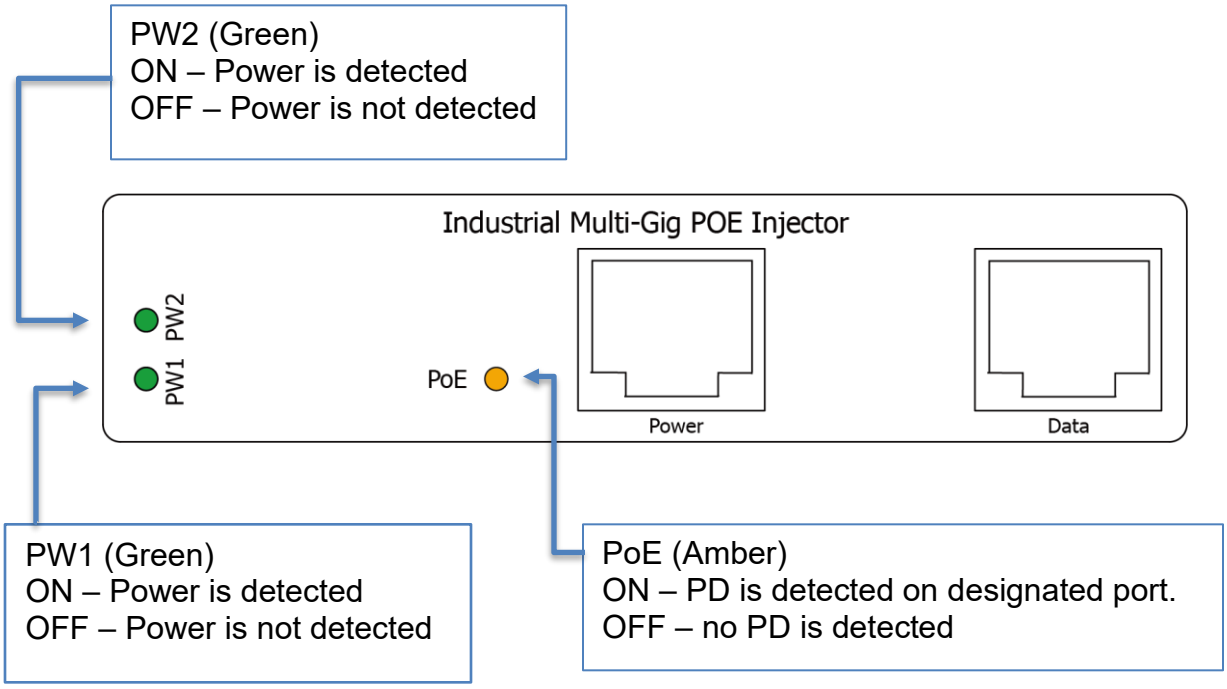
Power connecting procedure:



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



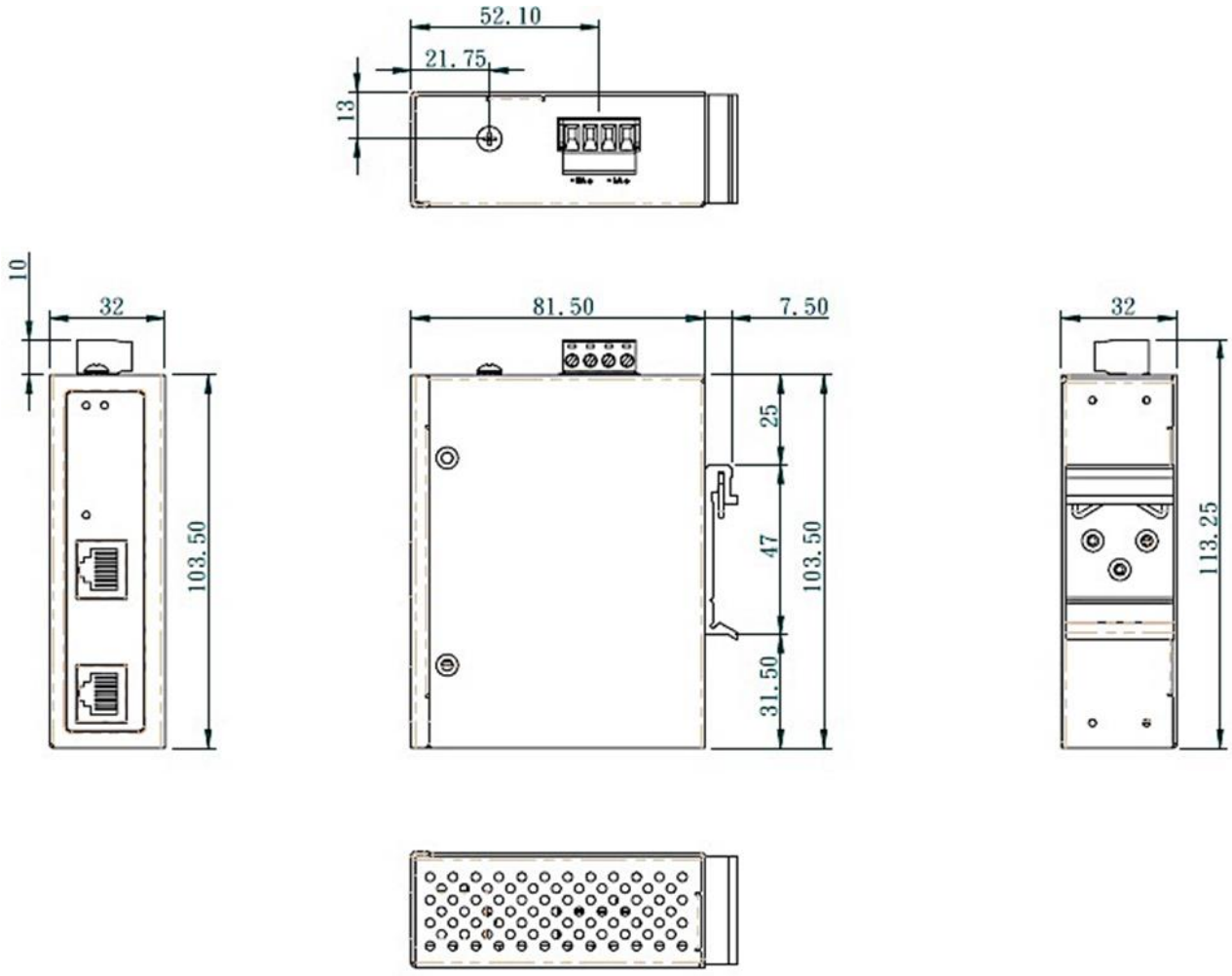
Specifications

IEEE Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3an 10GBase-T Ethernet IEEE 802.3af for POE IEEE 802.3at for POE+ IEEE 802.3bt Compliant with 60W uPoE standard Compliant with 95W Power over HDBaseT (PoH) standard
Network Connector	1xRJ-45 10M/100M/1000M/10GBaseT(X) Data 1xRJ-45 10M/100M/1000M/10GBaseT(X) Data with 90W 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 PoE (Amber): ON – 90W PSE is in active mode. OFF – PSE is in idle mode.
POE Pin Assignment	Pin 1 (V-), 2 (V-), 3 (V+), 6 (V+) Pin 4 (V+), 5 (V+), 7 (V-), 8 (V-)
Reverse polarity protection	Present
Overload current protection	Present
Power Supply	Redundant Dual DC 52V-56V Power Input
Power Consumption	1 W@52 VDC Without POE
POE power	Maximum POE power 90watts at 52VDC input
Removable Terminal Block	Provides 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 (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 mounting	DIN Rail Mount or Wall Mount

Certifications

Safety	LVD(EN60950-1)
EMC	CE, FCC, EN 55032/24
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.