

User Manual-DY-HI8011-90bt

Hardened Industrial 802.3bt Gigabit POE Injector, 1 x 10/100/1000M TX 90W PSE + 1 x 10/100/1000M TX,
52-56 VDC input, Operating Temp.: -40°C to +75°C

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 55032/24 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.

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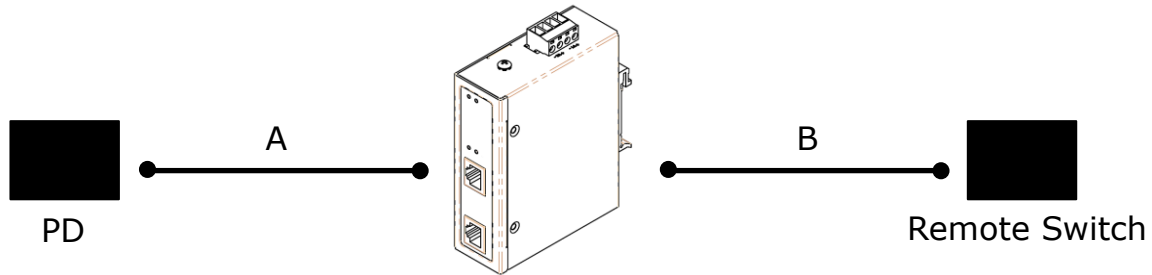
Trademarks:

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

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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/bt 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.

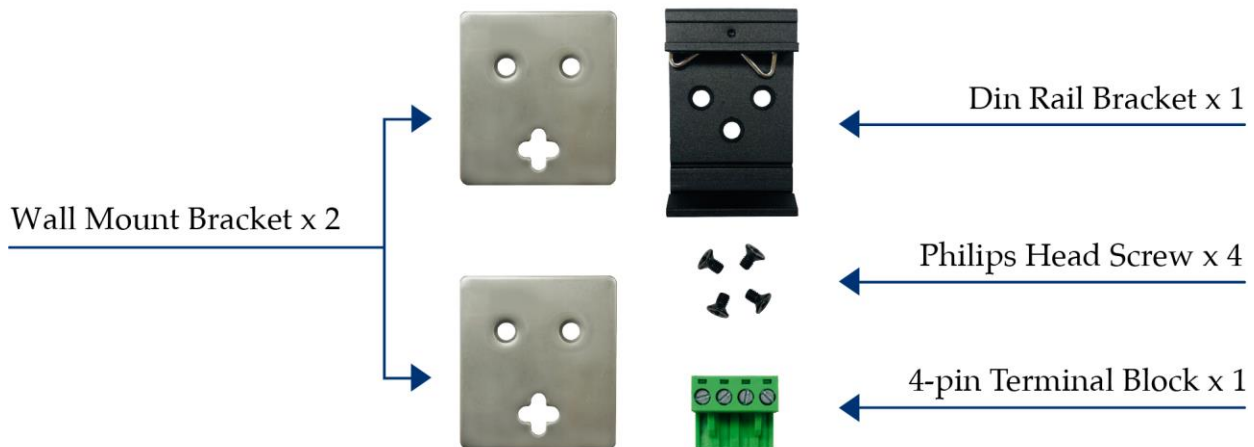
Introduction

This ultrahigh power IEEE 802.3bt 90Watts POE Injector is equipped with one IEEE 802.3af/at/bt 90W Giga 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, PoH, uPoE devices, and a broad range of applications. 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.

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Installation package

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



Power connection

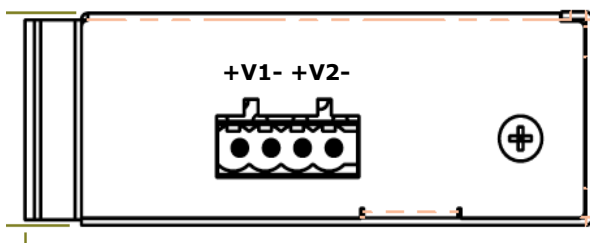
This unit provides a 4 pin terminal block. It can be operated using 52-56VDC power source. Always make sure your input voltage is within this supported voltage range.

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.

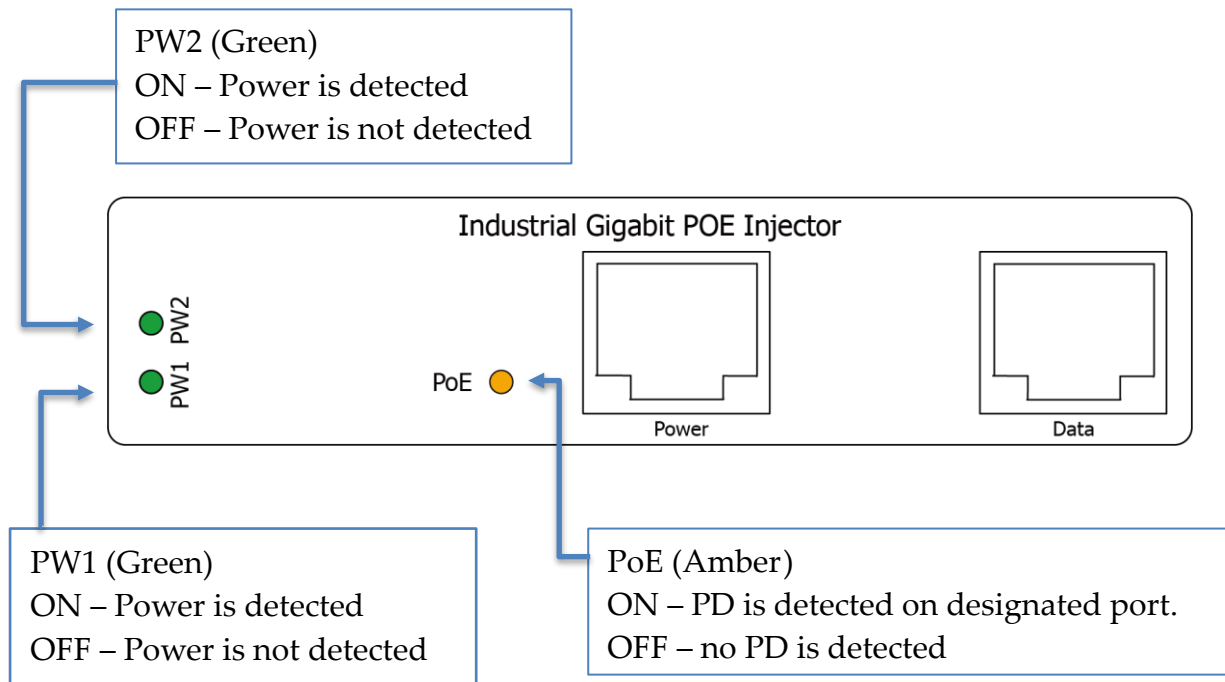
STEP 3 – Plug into terminal block socket shown above. Polarity needs to match V+ and V-.

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.

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LED indicator



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Specifications

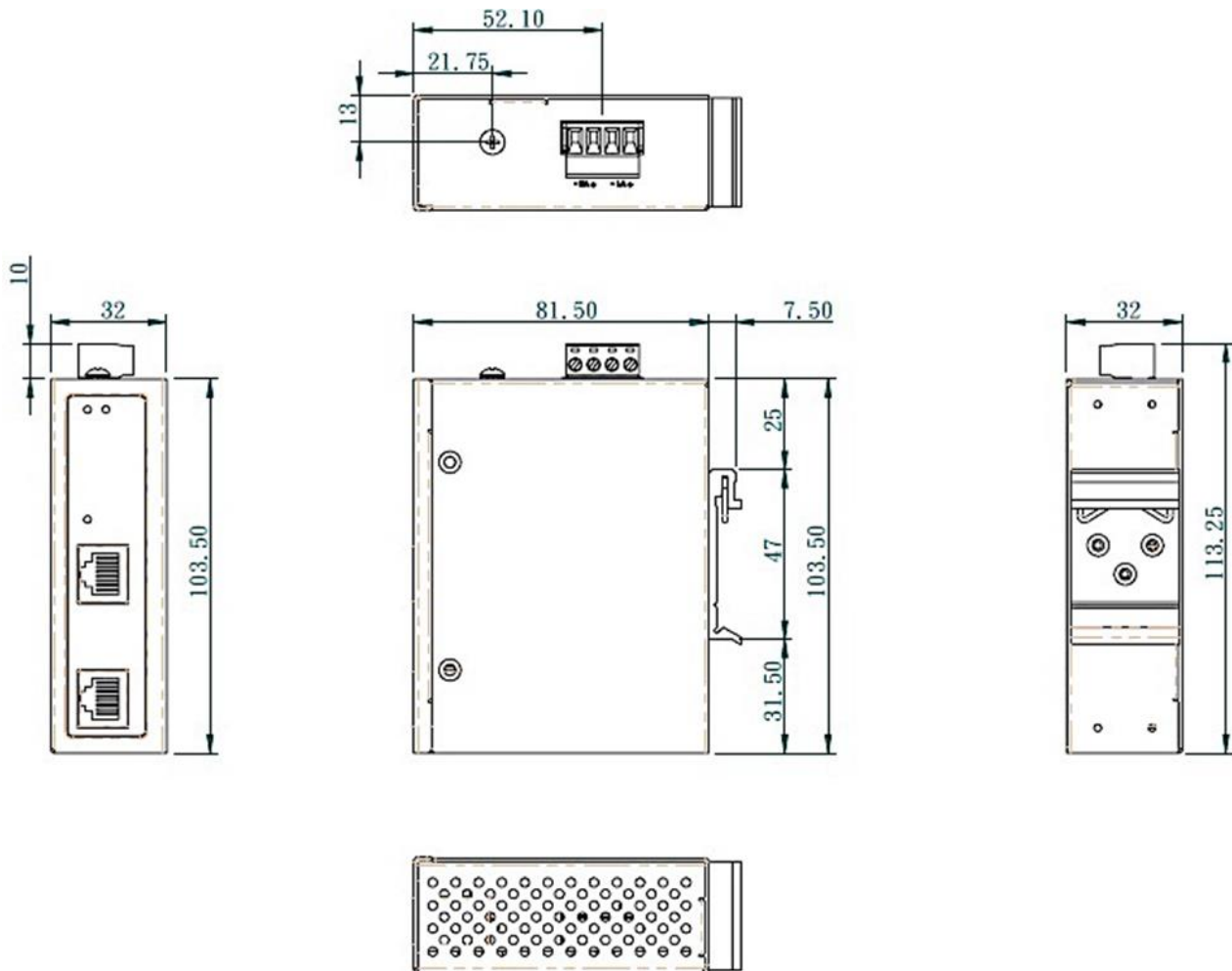
IEEE Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3af for POE IEEE 802.3at for POE+ IEEE 802.3bt Compliant with 60W uPoE standard Compliant with 95W Power over HDBaseT (PoH) standard
Network Connector	1xRJ-45 10M/100M/1000MBaseT(X) Data 1xRJ-45 10M/100M/1000MBaseT(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)	716,686 hrs (Telcordia (Bellcore), GB) at 40°C
Housing	Rugged Aluminum, IP30 Protection
Case Dimension (L X W X D) mm	103.5 x 32 x 81.5 mm (L x W x D)
Installation	DIN Rail Mount or Wall Mount
Certifications	
Safety	LVD(EN60950-1)
EMC	CE, FCC, EN 55032/24

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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

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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.