1. Package Contents

Thank you for purchasing Industrial IEEE 802.3at High Power over Ethernet Injector, POEIND1GAT. The "802.3at PoE+ Injector" mentioned in this User's Manual refers to the POEIND1GAT.

Open the box of the Industrial IEEE 802.3at High Power over Ethernet Injector and carefully unpack it. The box should contain the following items:

- Industrial IEEE 802.3at Gigabit High Power over Ethernet Injector x 1
- User's Manual x 1
- DIN-rail Kit x 1
- Wall-mount Kit x 1
- Dust Cap x 2

If any of these are missing or damaged, please contact your dealer immediately; if possible, retain the carton including the original packing material, and use them again to repack the product in case there is a need to return it to us for repair.

2. Product Features

➢ Interface
- 2 RJ45 interfaces
  - ◆ 1-port Data + Power output
  - ◆ 1-port Data input
- One terminal block for master and slave power input. (Power Range: 12 ~ 48V DC redundant power.)
➢ PoE
- Compliant with IEEE 802.3at Power over Ethernet Plus mid-span PSE
- Backward compatible with IEEE 802.3af PoE
- IEEE 802.3at/802.3af splitter devices compatible
- Supports PoE Power up to 30 watts for the PoE port
- Provides DC 56V power over RJ45 Ethernet cable to device with Ethernet port
- Auto-detection of PoE IEEE 802.3at/802.3af devices
- Remote power feeding up to 100m
➢ Hardware
- IP30 slim metal case
- LED indicators for power LED and PoE-in-use
➢ Industrial Case and Installation
- DIN-rail and wall-mount designs
- Supports 6000 VDC Ethernet ESD protection
- -40 to 75 degrees C operating temperature

3. Product Specifications

Product	POEIND1GAT
Hardware Specifications	
Hardware Version	3
Interface — Input Port	1 x RJ45 STP (Data In)
Interface — Output Port	1 x RJ45 STP (Data + Power Out)
Interface — Input Power Terminal Block	1
LED Indicator	System: Power 1 (Green), Power 2 (Green), Alarm (Red) PoE Port: PoE-in-use x 1 (Amber)
Network Cable	10BASE-T: UTP Cat. 3, 4, 5, up to 100m (328ft) 100BASE-TX: UTP Cat. 3, 4, 5, up to 100m (328ft) 1000BASE-T: UTP Cat. 5, 5e, 6 up to 100m (328ft) EIA/TIA- 568 100-ohm STP (100m)
Data Rate	10/100/1000Mbps
Dimensions (W x D x H)	32 x 87 x135 mm
Weight	489g

Unit Input Voltage	12 ~ 48V DC
Power Consumption	32 watts max.
Number of devices that can be powered	1
Installation	DIN-rail kit and wall-mount ear
Alarm	Provides one relay output for power failure; alarm relay current carry ability: 1A @ DC 24V
Enclosure	IP30 slim metal case
Power over Ethernet	
PoE Standard	IEEE 802.3at Power over Ethernet Plus mid-span PSE
PoE Power Output	30 watts
PoE Power Supply Type	Mid-span
Power Pin Assignment	4/5(+), 7/8(-)
Standards Conformances	
Standards Compliance	IEEE 802.3 10BASE-T Ethernet IEEE 802.3u 100BASE-TX Fast Ethernet IEEE 802.3ab 1000BASE-T Gigabit Ethernet IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus
FCC	FCC Part 15B Class A

CE	EMI	EN 55032
	EMS	EN 55035 EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-8
Stability Testing		IEC60068-2-32 (Free fall) IEC60068-2-27 (Shock) IEC60068-2-6 (Vibration)
Environment		
Operating Temperature		-40 ~ 75 degrees C
Storage Temperature		-40 ~ 85 degrees C
Humidity		5 ~ 95% (non-condensing)
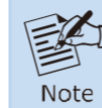
Note
The PoE power output ability will depend on the distance.
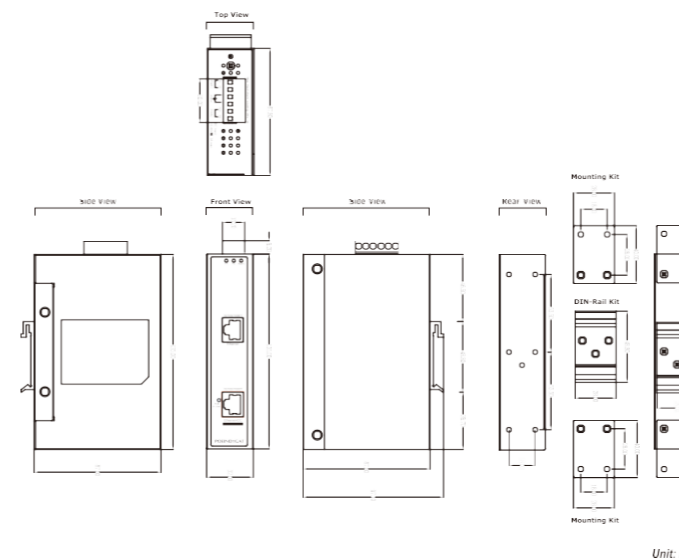
4. Hardware Description

4.1 Physical Dimensions

Figure 4-1: POEIND1GAT Dimensions

4.2 Product Outlook

Figure 4-2: POEIND1GAT Outlook

LED Indicators

LED	Color	Function
P1	Green	Indicates Power 1 has power.
P2	Green	Indicates Power 2 has power.
Alarm	Red	Indicates either Power 1 or Power 2 has no power.
PoE-in-Use	Amber	Indicates the port is providing DC in-line power.

4.3 Industrial PoE+ Injector Upper Panel

The upper panel of the Industrial PoE+ Injector consists of one terminal block connector within two DC power inputs. Figure 4-3 shows the upper panel of the Industrial PoE+ Injector.
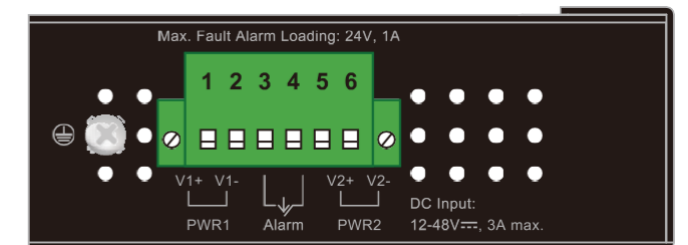

Figure 4-3: Industrial PoE+ Injector Upper Panel

Caution
PWR1 and PWR2 must provide the same DC voltage while operating with dual power input.

4.4 Wiring the Power Inputs

The 6-contact terminal block connector on the top panel of Industrial PoE+ Injector is used for two DC redundant power inputs. Please follow the steps below to insert the power wire.

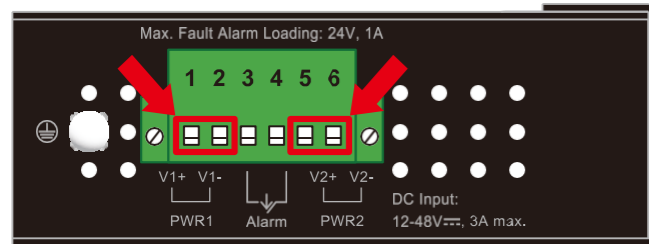1. Insert the positive and negative DC power wires into Contacts 1 and 2 for Power 1, or 5 and 6 for Power 2.

Figure 4-4: Power Input Pins

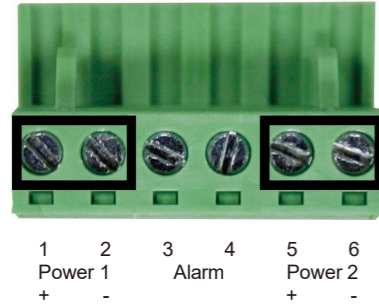2. Tighten the wire-clamp screws for preventing the wires from loosening.


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1      2      3      4      5      6
   Power 1       Alarm       Power 2
   +      -                  +      -
```

Figure 4-5: PWR1 & PWR2 Pins of Terminal Block

> **Note**
> The wire gauge for the terminal block should be in the range of 12 to 24 AWG.

4.5 Wiring the Fault Alarm Contact

The fault alarm contacts are in the middle of the terminal block connector as the picture shows below. Inserting the wires, the Industrial PoE+ Injector will detect the fault status of the power failure and then form an open circuit. The following illustration shows an application example for wiring the fault alarm contacts.
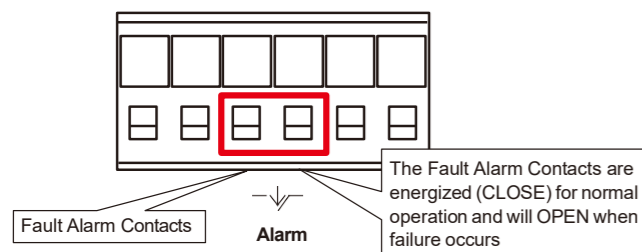

Fault Alarm Contacts   **Alarm**   The Fault Alarm Contacts are energized (CLOSE) for normal operation and will OPEN when failure occurs

Figure 4-6: Fault Alarm Contact

> **Note**
> 1. The wire gauge for the terminal block should be in the range of 12 to 24 AWG.
> 2. Alarm relay circuit accepts up to a maximum of 24V, 1A currents.

This section describes how to install the Industrial Equipment and make connections to it. Please read the following topics and perform the procedures in the order being presented.

> **Note**
> This following picture tells the user how to install the device, and the device is not POEIND1GAT.

5.1 DIN-rail Mounting

The DIN-rail bracket is already screwed on the industrial device. Please refer to the following figures for hanging the device:

Step 1: Place the upper DIN-rail bracket into the track first.

Figure 5-1: DIN-rail mounting

Step 2: The lower DIN-rail bracket is then placed into the track.

Figure 5-2: Complete DIN-rail mounting

5.2 Removal of Device

Step 1: Please refer to following procedure to remove the device from the track.

Figure 5-3: Removal of Device from Track

Step 2: Reverse the mounting steps to remove the device from the track.

5.3 Wall-mount Plate Mounting

To install the industrial device on the wall, please follow the instructions described below:

Step 1: Remove the DIN-rail bracket from the industrial device by using a screwdriver.

Step 2: Then screw the wall-mount plate on the rear panel of the industrial device.

Figure 5-4: Placing Wall-mount Plate on Industrial Device

Step 3: Use the holes in the corners of the wall-mount plate to hang the industrial device on the wall.

Step 4: To remove the wall-mount plate, reverse the steps above.

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6. Customer Support

Thank you for purchasing ShowMeCables products. You can browse our online resources and User's Manuals on www. ShowMeCables.com. If you require sales or support information, please contact the ShowMeCables support team using the information found below.

Show Me ™
C A B L E S

an **INFINITe** brand

Industrial IEEE 802.3at/af Gigabit PoE+ Injector

Model: POEIND1GAT
User's Manual

Energy Saving Note of the Device

This power required device does not support Standby mode operation. For energy savings, please remove the power cable to disconnect the device from the power circuit.

Without removing power cable, the device can still consume power from the power source. In view of Saving the Energy and reducing the unnecessary power consumption, it is strongly suggested to remove the power connection from the device if this device is not intended to be active.