

PT-PSE109GBRO-D PoE Injector

Quick Installation Guide



www.procetpoe.com

Declaration

This document belongs to PROCET company. It is not allowed to reproduce and modify without the original author's permission. It is PROCET's policy to improve its products as new technology, components, software, and firmware at any time. PROCET, therefore, reserves the right to change specifications without prior notice. Please follow WEEE (Waste Electrical and Electronic Equipment) disposal instructions for old electronic products. Please do not dispose of the old product in your general household waste bin.



The symbol indicates that the product should not be discarded as unsorted waste but must be sent to separate collection facilities for recovery and recycling.

Overview

The installation Guide for PT-PSE109GBRO-D and mainly introduces the hardware specification, installation methods, and precautions of the installation. There may be differences in the appearance and configuration from other models. All product images in this manual are for illustration purposes only and may differ from the actual product.

This manual includes the following chapters:

1. Product Introduction. Including the basic functions and specification of PT-PSE109GBRO-D, as well as the product appearance and applications introduction.
2. Installation Introduction. Introducing the preparation work and precautions before installing the product.
3. Product Installation. Two methods of product installation.

For Whom

Network Engineers
Network Administrators
Field Technicians

Table of contents ---

1. Introduction	01
1.1 Introduction	01
1.2 Appearance	01
1.3 Specification	03
2. Installation Preparation	04
2.1 Package contents	04
2.2 Installation toolkit	04
2.3 Inspection	04
3. Installation	06
3.1 Wall mounting	06
3.2 Slot-fasten mounting	08
3.3 Grounding	09
3.4 Inspection	11

1.Introduction

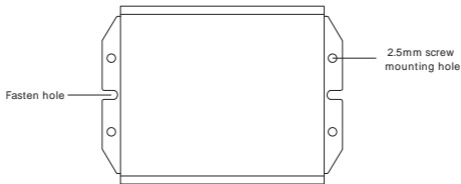
1.1 Introduction

PT-PSE109GBRO-D is a single port industrial-rated DC to DC PoE injector. Enclosed in a high impact metal shell. Two types of DC input which can be powered through a 2PIN terminal block or a DC jack. The input voltage range is 50-56Vdc.

PoE output port with 6KV (10/700us) surge protection, which is compliant with 802.3af/at/bt standard that provides power up to 90W(Max) for remote PDs over 4 pairs at 10/100/1000Mbps of data speed.The effective distance is 100 meters over Cat5e/Cat6 cables. Working for wireless access points, network cameras, routers, and other high power Ethernet terminals. For longer distance request, our product PT-PEX01G-OT (outdoor or indoor PoE extender) can help.

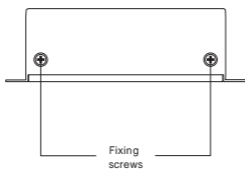
1.2 Appearance

- Upper View



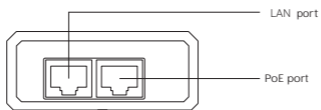
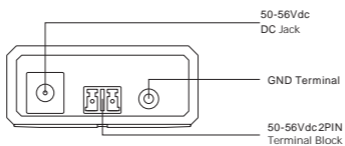
1-1 Upper View

• Side View



1-2 Side View

• Front View



1-3 Front View

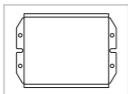
1.3 Specification

Items	Description	
Input	50-56Vdc 2.0A Max	
PoE Standard	IEEE802.3af/at/bt/PoE++	
Output	48-54Vdc 1.75A (Max 90W)	
Power pins	4/5(+),7/8(-),3/6(+),1/2(-)	
Data Speed	10/100/1000Mbps	
Work Temp.	-40 to 65	
Operating Humidity	20%-80% , non-condensation	
Operating Altitude	Up to 2000 meters	
Storage Temp.	-20 to 70	
Storage Humidity	10%-95% , non-condensation	
Network Protocol	IEEE802.3/IEEE802.3u/IEEE802.3ab	
Media Support	10/100/1000BASE-TX Cat5 or above UTP (328 feet)	
PoE Surge Protection	Protected line:1,2,3,4,5,6,7,8	
	Common mode surge protection(10/700us): 6kV	
	Differential mode surge protection (10/700us): 1.5KV	
Regulatory Compliance	CE FCC	
IP Rated	IP40	
Dimensions	98.5mm x 70.27mm x 29.7mm (192.1g)	
LED	PWR	Power Indicator
	Active	PoE Power Indicator
	FCC	FCC Part 15 Subprt B
	CE	EN 55032:2015/A11:2020
		EN 55035:2017/A11:2020

2.Installation Preparation

2.1 Package contents

Open the box of the PT-PSE109GBRO-D and carefully unpack it, the box should contain the following items:



PT-PSE109GBRO-D



Ground
lug Wire & 2.5
screw



Operation Manual

2.2 Installation toolkit

These tools may be needed during equipment installation, and should be prepared by yourself: level ruler, marking pen, craft knife, wire stripper, network pliers, impact drill, different matching drillbits, rubber hammer, cross screwdriver, wrench, ladder, etc.

2.3 Inspection

2.3.1 Connect the device to a DC Power System and check the PWR LED to ensure proper function before installation.

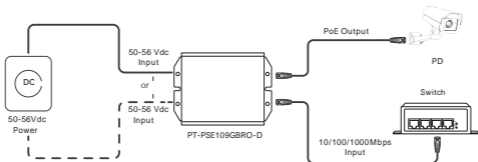
2.3.2 Connect the PoE port to the PoE powered device(PD). Such as the IP Cameras or Wireless APs.

As showed in Figure 2-1 ;



Caution :

Please use PoE powered device(PD) that complies with IEEE802.3af/at/bt/PoE++ to connect this product.



2-1 Device Connection

Connect either a DC port to a DC Power System with the 50-56Vdc. The unit's POWER LED should now light up, confirming power. The unit's ACTIVE LED flashes which means have power not connect to PD or connect to PD and make the PoE identification handshake with IEEE802.3af/at/PoE+ PDs. The unit's ACTIVE LED is solid light which means normal work with the PD.



Caution:

- We recommend to use Cat5 or higher UTP/STP cables for 100Base-TX Ethernet.
- We recommend to use Cat5e or above UTP/STP cables for 1000Base-T or 2.5GBase-T Ethernet.

To ensure better lightning protection for outdoor PD, it is recommended to use PROCET Ethernet surge protection products. For more information, please visit <http://www.procetpoe.com>

3.Installation

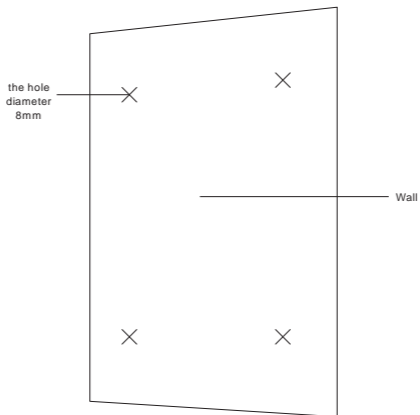
This product is safe to use for slot-fasten mounted and wall-mounted installation.

3.1Wall mounting

The device will be fixed on the wall with screw into the poles, and the hole diameter should be between 8mm to 10mm.

3.1.1Mark the screw hole positions with marking pens.

As showed in 3-1.

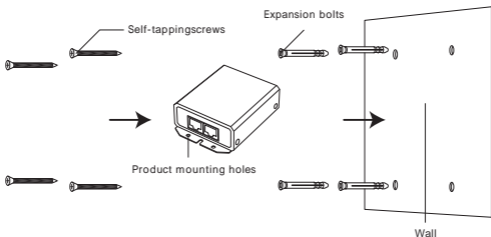


3-1 Marks for Fixing

3.1.2 Drill an 8mm diameter hole at the marked position and fix the expansion bolt into the hole by hitting it with a rubber hammer.

3.1.3 Fix the product with screws and tighten them into the expansion bolts.

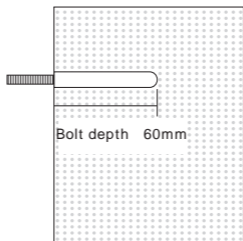
As showed in 3-2.



3-2 Installation

Caution in drilling process :

- Keep the drill bit perpendicular to the wall surface, hold the drill handle tightly with both hands, maintain a steady direction to avoid shaking and damaging the wall or causing the hole to tilt.
- If the wall is too hard and smooth for the drillbit to locate, use a center punch to make an indentation at the hole position to help guide the drillbit.
- The depth of each hole should be consistent.



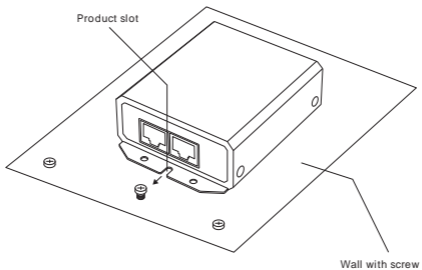
3-3 Bolt depth

3.2 Slot-fasten mounting

Use the slot-fasten mounting to fix the product on the wall with screws.

3.2.1 Loosen the screws and put the product slot into the screw.

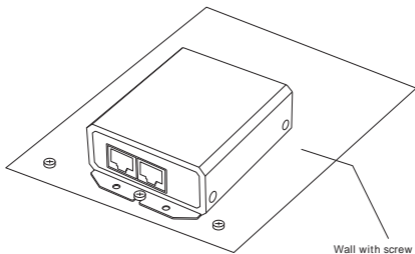
As showed in 3-4.



3-4 Slot-fasten mounting

3.2.2 Make sure the slot is fixed to the screws tightly and tighten the screws.

As showed in 3-5..

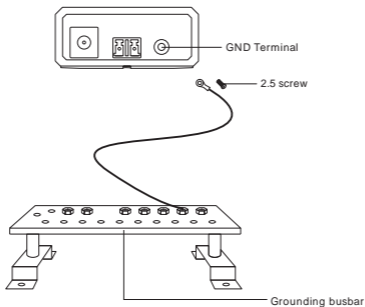


3-5 Slot-fasten Installation

3.3 Grounding

PROCET PoE injector PT-PSE109GBRO-D has the following grounding solutions for reference during construction:

If the installation is in the computer room, it can be connected to the dedicated grounding busbar in the room. The grounding busbar is a connecting conductor between the grounding bodies of the building, such as flat iron, flat steel, nanomaterial conductors, copper-clad steel, etc. Pls refer to the figure 3-6.



3-6 Grounding

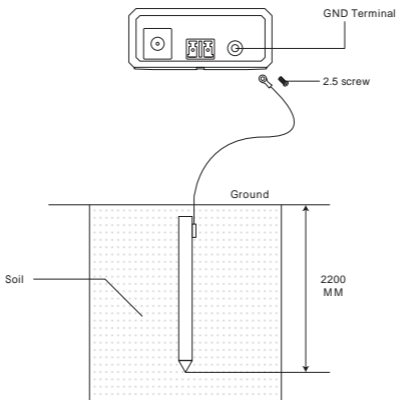
For the safety of personnel and equipment in an environment without dedicated grounding equipment, a simple grounding device can be constructed as follows:

- Prepare a 6mm 2 grounding wire or a braided soft copper wire.
- Prepare a copper tube or angleiron, or other metal tube, bury it underground to a depth of one meter or more as a grounding electrode.
- Use the grounding wire to connect the external grounding terminal of the product to the metal tube. (or angle iron)



Caution :

Use a galvanized metal pipe buried underground at a depth of one meter or more, such as a water or sewer pipe, as an emergency grounding if no other grounding environment is available.



3-7 Simple grounding

3.4 Inspection

Inspect the installed equipment before putting it into operation :

- Make sure the PD is compliant with our product.
- Make sure the Ethernet cable connection is correct.

Make sure all connections are correct, and turn on the power, inspect all the indicators.

Qualification Card

PASS