PROCET
PoE System

PoE Extender

Data sheet

PT-PEX01GB

07/2025,A001483011-30

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声明

Document History

Version	Date	Notes
v1.0	2025/07/30	First Version Release

For Whom

This manual is intended for:
Network Engineers
Network Administrators
Field Technicians

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1 Introduction

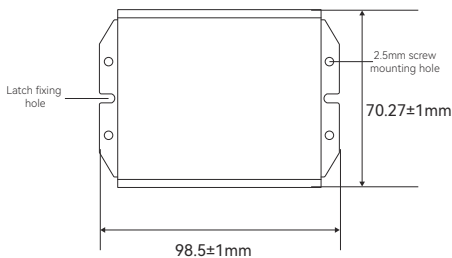
1.1 Introduction

PT-PEX02GB is an industrial-rated PoE Extender with two PoE output ports, specially designed for complex backhaul and networking applications. Enclosed in a high-impact metal shell. The 2 port 10/100/1000Mbps includes: 1 x PoE-powered input port with 802.3bt/PoE++ at 60W or higher of 90W(Max) and 1 x PoE output ports with 6KV (10/700us) surge protection. PoE output port delivers 60W(Max) power for remote PD.

PoE Input port requiring more power which is powered by ultra 802.3bt works with an input voltage of 44- 57Vdc and operates under -40℃ to +65℃. Equipped detecting chip inside which will make the PoE identification handshake with IEEE802.3af/at/bt PD, such as wireless APs, IP cameras, base stations, Microwave radio, and other PoE power Ethernet backhaul devices. For planning purposes, the total effective distance from Ultra PoE to PDs is 200 meters over CAT5e/CAT6 cables without local power.

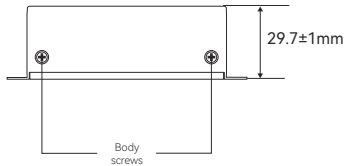
1.2 Appearance

- Top View

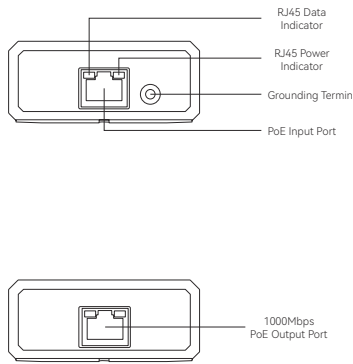


This product features one PoE input port and 1 PoE output ports, as well as one mounting tab on either side.

- Side View



- Front View



Indicators with status descriptions:

Item	Status	Description
PoE Load Indicator (Green)	Solid Green	PoE power supply
	Blinking	PD detecting
Data Indicator (Yellow)	Solid Yellow	Data Connection
	Blinking	Transmitting Data
	Off	The port is not connected or System fault

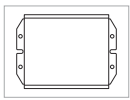
1.3 Specification

Item	Description
Input	44-57V 1.5A Max
PoE Std.	IEEE802.3af/at/bt
Output	55V / 1.1 A (Max 60W)
Power Pins	4/5(+),7/8(-),3/6(+),1/2(-)
Data speed	10/100/1000Mbps
Op. Temp.	-40℃ to 65℃
Op. Humid.	20%-80%，non-condensation
Op. Alti.	Up to 2000 meters
Stor. Temp.	-40℃ to 85℃
Stor. Humid.	10%-95%，non-condensation
Net. Proto.	IEEE802.3 / IEEE802.3u / IEEE802.3ab
Data Transfer	10/100/1000BASE-TX Cat5 or above UTP（≤ 328 feets）
Certification	CE FCC
IP Rated	IP40
Size & Weight	98.5mm×70.27mm×29.7mm (184g)
EMC	EN 55032:2015/A11:2020
	EN 55035:2017/A11:2020

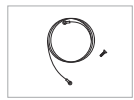
2 Installation preparation

2.1 Package contents

Open the box of the PT-PEX02GB and carefully unpack it, the box should contain the following items:



PT-PEX01GB



Ground lug Wire & 2.5 screw

User Manual

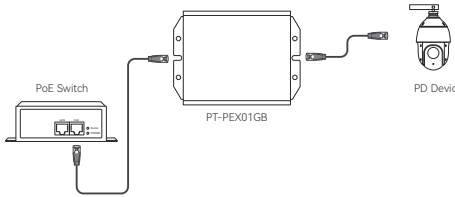
2.2 Installation toolkit

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

2.3 Inspection

2.3.1 Connect the device to a PoE switch and check the PWR LED toensure proper function before installation.
2.3.2 When using standard PoE power supply, the Ethernet cable needs to be connected to the PoE PD, such as a PoE camera. as shown in Figure 2-1

Caution:
Please use PoE power supply equipment that complies with corresponding standard to connect this product.



2-1 Device connection

Connect PoE IN to PoE switch, the yellow data indicator and green power indicator are on, while the connection is done.
Now you can connect the extender with PDs in two PoE output port. The yellow data indicator and green power indicator are on, and the PDs are successfully connected.

Caution:

- We recommend to use Cat5 or higher UTP/STP cablesf or 100 Base-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

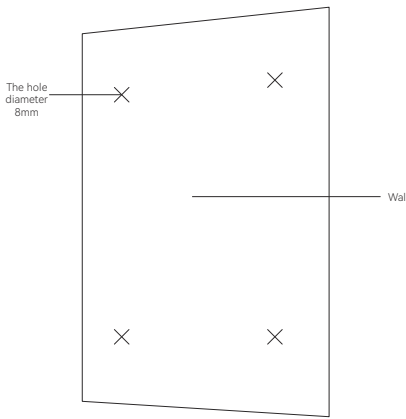
3 Installation

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

3.1 Wall mounting

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

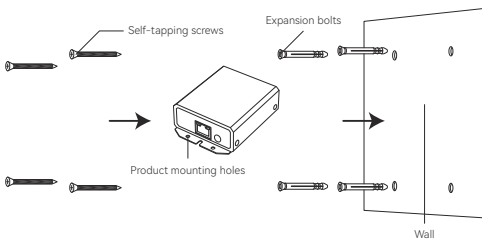
3.1.1Mark the screw hole positions with marking pens. As showed in 3-1.



3-1 Marks for holes

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.

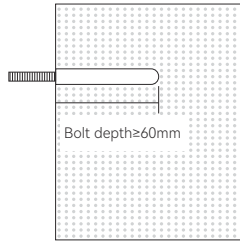
3.1.3 Fix the product with screws and tighten them into the expansion bolts. As showed in 3-2.



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 thewall 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.

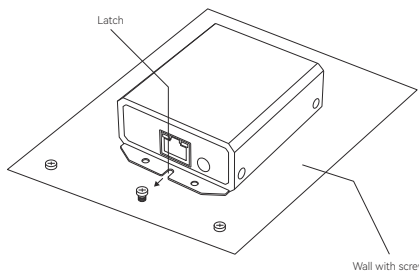


3-3 Bolt depth

3.2 Latch Installation

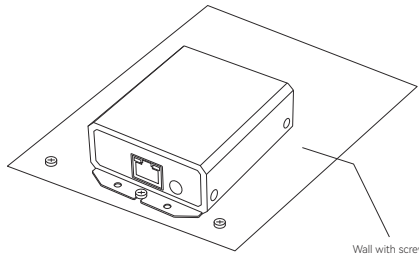
Use the slot-fasten mounting to fix the product on the wall with screws.

3.2.1Loosen the screws and put the product slot into the screw.
As showed in 3-4.



3-4 Latch Installation

3.2.2 Make sure the slot is fixed to the screws tightly and tighten the screws. As showed in 3-5.

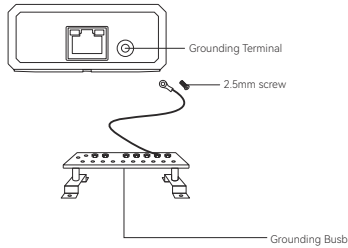


3-5 Latch Installation

3.3 Grounding

PROCET PoE extender PT-PEX01GB has the following grounding solutions for reference duringconstruction:

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, nano material conductors, coppe r -clad steel, etc. Pls refer to the figure3-6.



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:

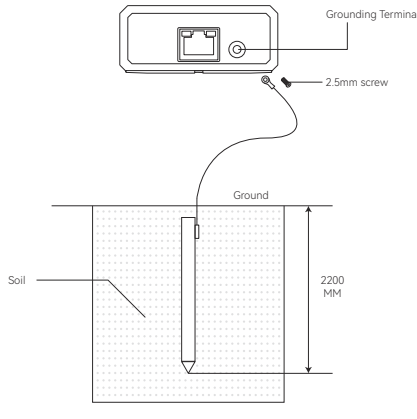
a. Prepare a 6mm 2 grounding wire or a braided soft copper wire.

b. 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.

c. 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 pipeburied underground at a depth of one meter or more, such as a water or sewagepipe,as an emergency grounding if no other grounding environment is available.



3-7 Simple Grounding

3.4 Inspection after installation

Inspect the installed equipment before putting it into operation:

- Make sure the PoE switch 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.

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