

PT-PR01G-10 PoE Surge Protector

# Quick Installation Guide



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## Declaration

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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

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The installation Guide for PT-PR01G-10 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-PR01G-10, 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.

## For whom

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Network Engineers  
Network Administrators  
Field Technicians

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- 1. Introduction 

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# 1. Introduction

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## 1.1 Introduction

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PT-PR01G-10 is a single-port Ethernet surge protector. Enclosed in an Aluminum Alloy shell, with a silver color exterior, complemented by an anodized aluminum surface. Enhanced RJ45 socket exhibits minimal signal attenuation. High-quality Gas discharge tube(GDT). Withstand extreme environmental conditions within a temperature range of -40 to 85 degrees Celsius. Max Discharge Current: 10KA (8/20us, 1.25KA per line). Supports power of 120W, 60Vdc(max) Ethernet equipment.

PT-PR01G-10 can not only work with IEEE802.3af/at/bt/PoE++ standard devices, but also supports non-standard Ethernet equipment, that well protects your devices against surge damage.

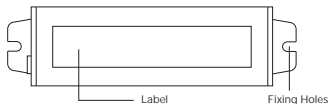
The common mode surge voltage exceeds 20KV(10/700us) and the differential mode surge voltage is 1.5KV(10/700us).

It supports not only 10/100/1000Mbps of data speed, but also 2.5GbE/5GbE/10GbE NBase-T.

## 1.2 Appearance

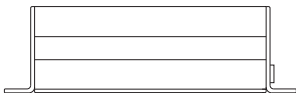
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- Upper View



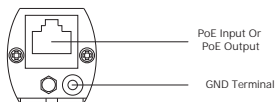
1-1 Upper View

- Side View



1-2 Side View

- Front View



1-3 Front View

### 1.3 Specification

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Items	Description
Input Voltage	60Vdc (Max)
Max Discharge Current	10KA(8/20us,1.25KA per line)
Maximum Operating Current	1A for 2 pairs, 2A for 4 pairs
Maximum Operating Power	120W Max
PoE Surge Protection	Protected Line: 1,2,3,4,5,6,7,8
	Common Mode Protection Level(10/700us): 20KV
	Differential Mode Protection Level(10/700us): 1.5KV
Data Speed	10/100/1000Mbps/2.5G/5G/10G
Operating Temp.	-40°C to 85°C
Operating Humidity	20%-80%, non-condensation
Operating Altitude	Up to 5000 meters
Storage Temp.	-40°C to 85°C
Storage Humidity	10%-90%, non-condensation
Regulatory Compliance	CE
IP Rated	IP40
Dimensions & NW	103mm X 28mm X 30mm (71.5g)

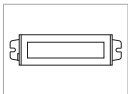
## 2. Installation

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### 2.1 Packing Contents

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Open the box of the PT-PR01G-10 and carefully unpack it, the box should contain the following items:



PT-PR01G



Operating Manual



Ground  
lug Wire& M6  
screw

### 2.2 Installation Toolkits

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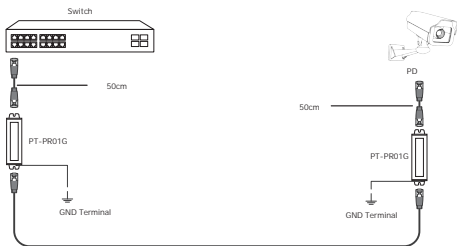
These tools may be needed during equipment installation, and should be prepared by yourself: level ruler, marking pen, craft knife, wire stripper, network pliers, impact drill, different matching drillbits, rubber hammer, cross screwdriver, wrench, ladder, etc.

### 2.3 Inspection

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Connect the PT-PR01G-10 with the protected device, and check if the terminal device work normally.





2-1 Device Connection



**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 Ethernet.

We recommend to use Cat6 or above UTP/STP cables for 2.5/5/10G Ethernet.

## 2.4 Caution

- 1.This device is for indoor use only. If you need to use it outdoors, please use it with a waterproof case.
- 2.Please use Cat 6 or ethernet cables with shielding.
- 3.Grounding is required when using.
- 4.It is recommended to place the device in close proximity to the protected equipment with a distance of 50cm.  
Vertical installation is also recommended with a tilt angle not exceeding 50°.
- 5.Please install the device on a wall or metal back panel. Do not use a wooden back panel to prevent the risk of fire.

## 3. Installation

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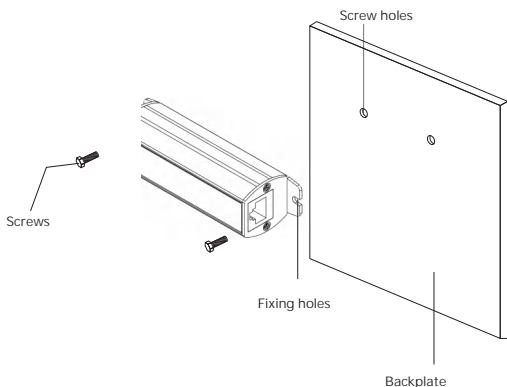
This product is safe to use wall-mounted installation.

### 3.1 Wall mounting

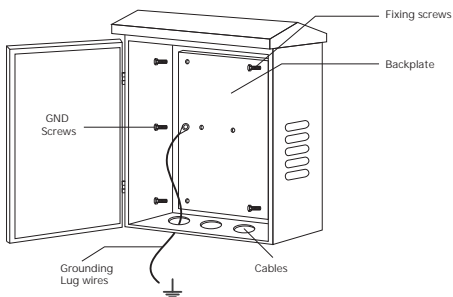
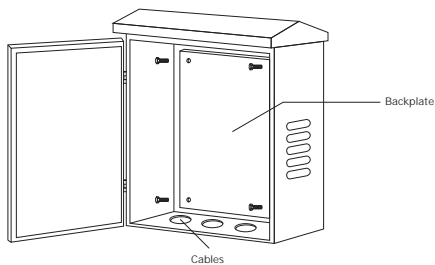
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If it is placed in an outdoor environment, please install the device in a waterproof case with a height of 45cm if possible.

3.1.1 Fix the product with screws and tighten them into the screw holes.



3-1 Wall mounting installation



3-2 Installation in waterproof case

### 3.2 Inspection

Inspect the installed equipment before putting it into operation :

- Make sure the PD connected can work normal.
- Make sure the Ethernet cable connection is correct.
- Make sure the Grounding is correct.



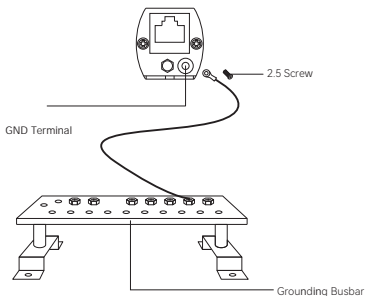
#### Caution :

Waterproof Ethernet cables should be with a protective sheath. CAT6 cables are recommended.

### 3.3 Grounding

PROCET Single port PoE surge protector PT-PR01G-10 has the following grounding solutions for reference during construction:

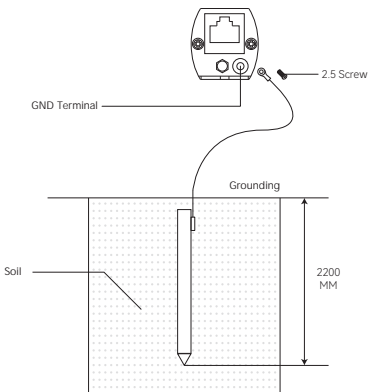
If the installation is in the computer room, it can be connected to the dedicated grounding busbar in the room. The grounding busbar is a connecting conductor between the grounding bodies of the building, such as flat iron, flat steel, nanomaterial conductors, copper-clad steel, etc. Pls refer to the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



3-3 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<sup>2</sup> grounding wire or a braided soft copper wire.
- Prepare a copper tube or angle iron, 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)



3-4 Simple Grounding



**Cautions:**

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

Qualification Card

PASS