![PROCET PoE System logo]

PT-PSE105GBSN-D-10 10G Fiber to PoE Converter

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

The installation Guide for PT-PSE105GBSN-D-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-PSE105GBSN-D-10, as well as the product appearance and applications introduction.

2. Installation Introduction. Introducing the preparation work and precautionsbefore installing the product.

3. Product Installation. Two methods of product installation.

For Whom

Network Engineers
Network Administrators
Field Technicians

Table of contents
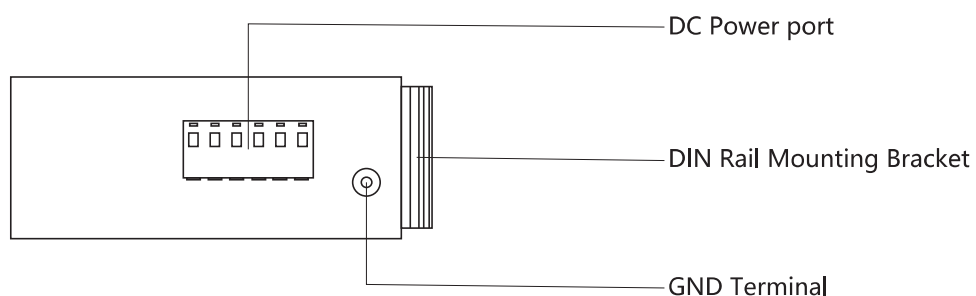
1. Introduction

1.1 Introduction

PT-PSE105GBSN-D-10 is a single-port media converter with PoE
function. The single PoE output port delivers 1.75A up to 95W(max)
power for remote PDs over 4 pairs. It is passive PoE injector, and it will
power to PDs directly without any detection action. Such as PTZ cameras,
wireless APs, base stations, and other PoE-powered deviceswhich need
high power watts.
RJ45 port supports 2.5GbE NBase-T, while the fiber slot only supports
10GE SFP+ of optical module. Enclosed in an IP40 high-impact metal case
with a DIN Rail mount bracket, designed for indoor use but can work
outdoors by covering it with a waterproof case. It works with an input
voltage of 50-57Vdc and operates under -40°C to +65°C. For planning
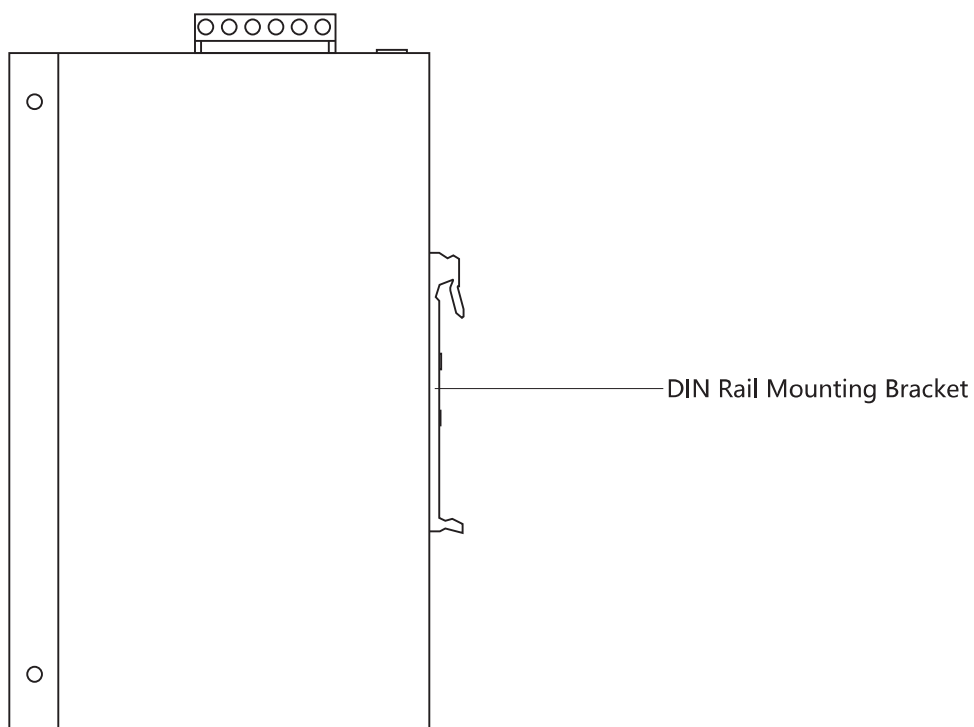purposes, the effective distance is 100 meters over Cat6 cables.
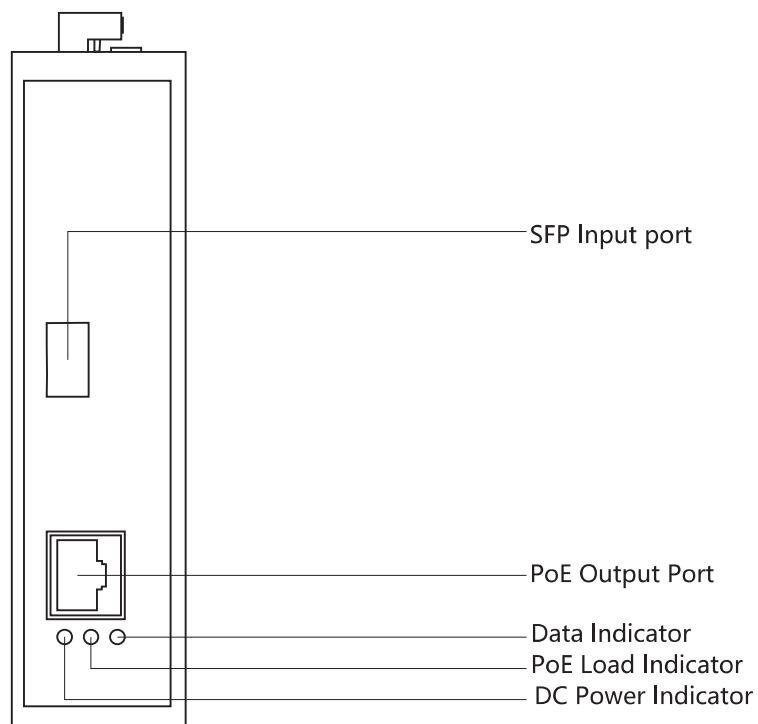
1.2 Appearance

- Upper View

DC Power port

DIN Rail Mounting Bracket

GND Terminal

1-1   Upper View

● Side View

DIN Rail Mounting Bracket

1-2   Side View

● Front View

SFP Input port

PoE Output Port

Data Indicator
PoE Load Indicator
DC Power Indicator

1-3   Front View

1.3 Specification

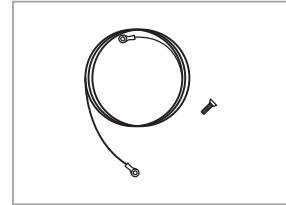| Items	Description
Input	50-57Vdc 2.0A
Output	48-55Vdc 1750mA
Power Pins	4/5(+), 7/8(-) & 3/6(+), 1/2(-)
PoE Standard	Passive
Data Speed	100M/1000M/2.5G，10G SFP+
Work Temp.	-40℃ to 65℃
Operating Humidity	20%-80%，non-condensation
Operating Altitude	Up to 5000M
Storage Temp.	-40℃ to 85℃
Storage Humidity	10%-90%，non-condensation
Network Protocol	IEEE802.3u/ab/bz/an IEEE802.3ae
Regulatory Compliance	CE FCC
IP Rated	IP40
Dimensions & NW	144.5mm× 95mm× 35.4mm (485g)
EMC	EN 55032:2015/A11:2020
	EN 55035:2017/A11:2020

2.Installation Preparation

2.1 Package contents

Open the box of the PT-PSE105GBSN-D-10 and carefully unpack
it, the box should contain the following items:
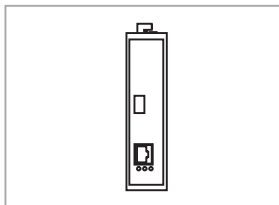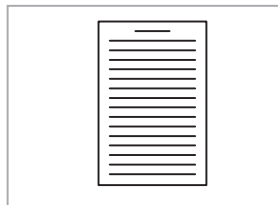
|		
PT-PSE105GBSN-D-10	User manual	Ground lug Wire& 2.5 screw

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 drilbits, 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；

Switch

SFP Port
Data Input

Power Input

DC

PT-PSE105GBSN-D-10

PoE Data&Power
Output

PD
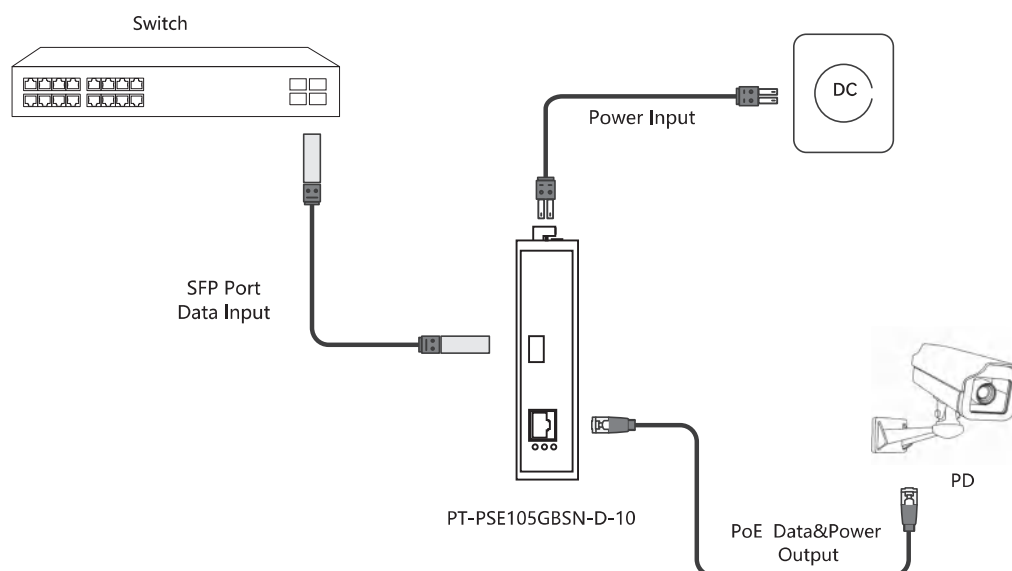
2-1   Device Connection

Caution:
1. Please read the instructions carefully and follow the standard operating procedures before using.
2. Please place it in a well-ventilated and dry area, and it is for indoor use only.
3. Connect the DC power cable with positive and negative wires into the DC terminal block of Procet Injector.
4. Connect a fiber cable with SFP+ optical module at 10G from your switch into the injector's SFP slot for data Input.(The optical module does not include in the package). You can choose either single-mode or multi-mode SFP transceivers.
5. Connect a CAT6 cable with the RJ45 connector into the RJ45 socket labeled PoE. On the other end of the CAT6 cable, connect to your PoE Device (such as IP Cameras etc). The total Ethernet cable length can not exceed 100 meters.
6. The device must be placed on a stable surface, preferably affixed and mounted permanently. Do not leave it "dangling" and use plugged-in cables in tension as support. Drops, falls, and impacts experienced by the injector can compromise the internal components & cause premature failure.
7. Do not place heavy objects on top of this injector. Allow at least 5cm of clearance on all sides of the device for heat ventilation / natural convection.

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
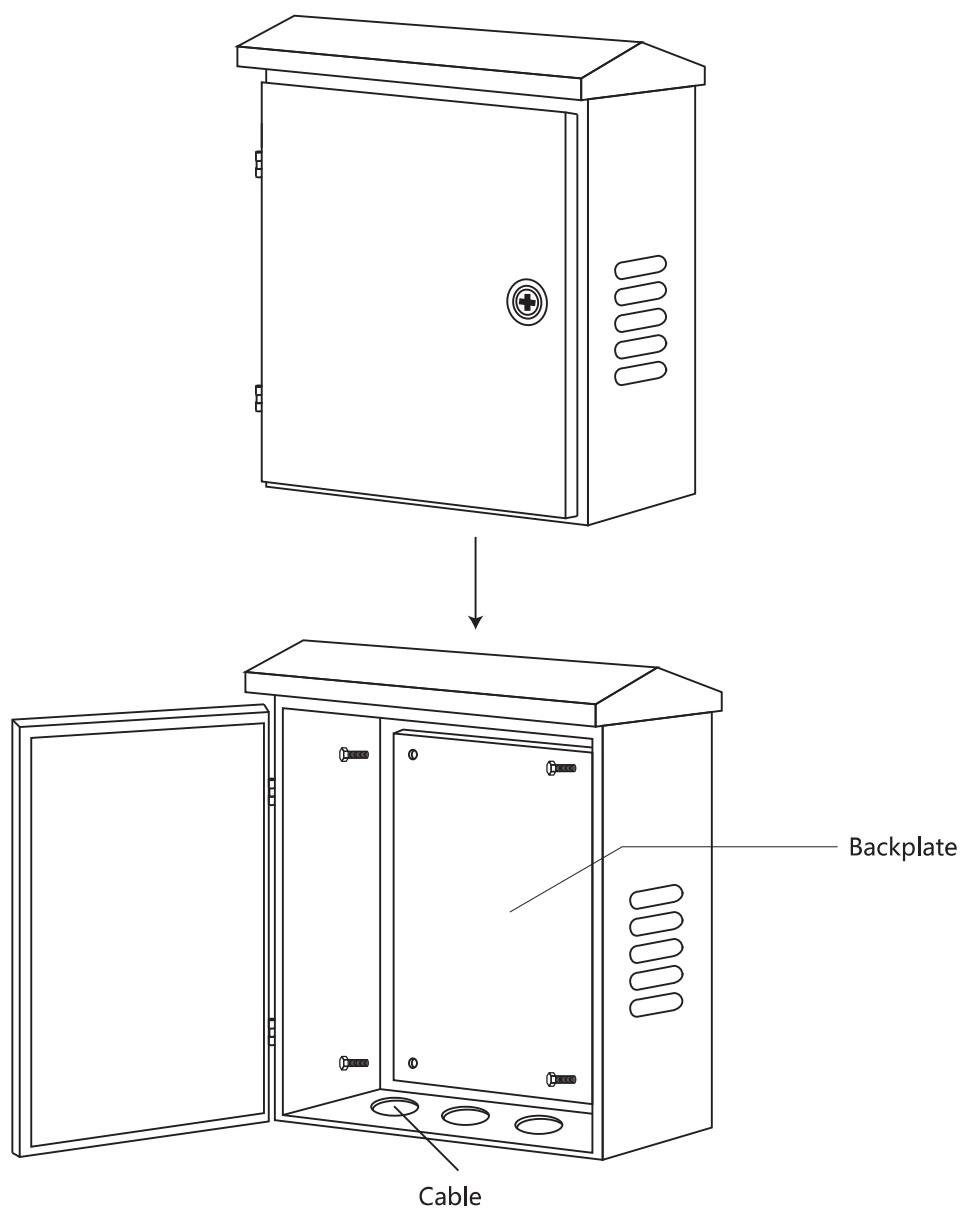
3. Installation

This product is safe to use for waterproof case installation and wall-mounted installation.

3.1 Installation in waterproof case

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

3.1.1 Install the waterproof case first, and keep the case open.
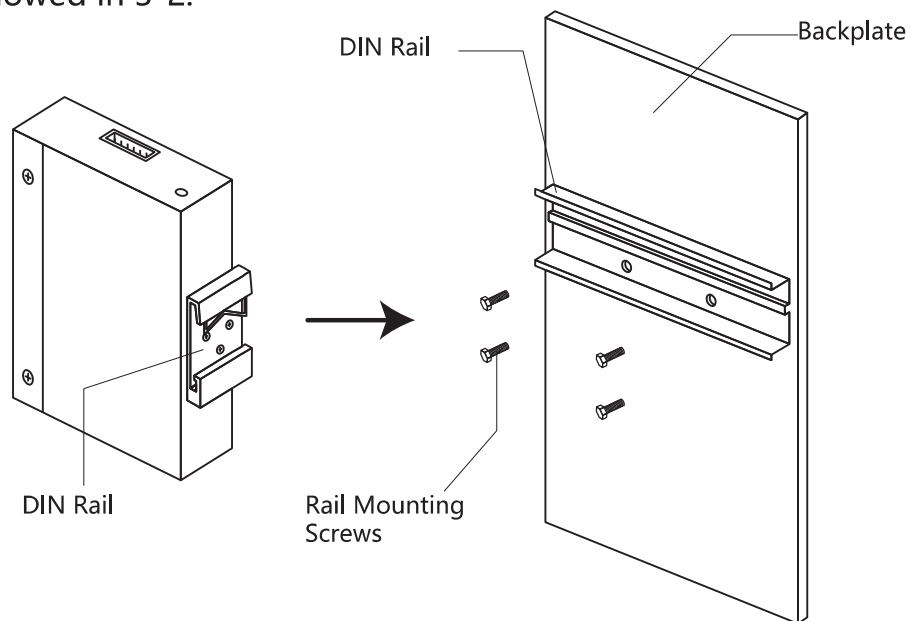As showed in 3-1.

3-1   Waterproof case

3.1.2 Remove the metal backplate from the waterproof case and fix the DIN rail bracket on the backplate, then install this product on DIN rail bracket.
As showed in 3-2.

DIN Rail

Backplate

DIN Rail

Rail Mounting
Screws

3-2   Installation

3.1.3 Reinstall the backplate with the installed product into the waterproof case.

Caution:
Please use the expansion bolts, when you install the product with wall-mounted way.

3.2 Connection

After installation is done, the next step is the connection. The following precautions should be taken when connecting the Ethernet cable:

3.2.1 Lay the cable according to the design requirements. The cable should be laid firmly and neatly, with no crossing, twisting, or cracking.
3.2.2 Do not lay the cable together with high-voltage pipelines, fire pipelines, or building lightning protection systems to avoid interference from strong electricity or magnetism.
3.2.3 Use PVC pipes, iron pipes, Prilka pipes, or cable trays for cable laying. The cable trays should be placed against the wall, with neat and beautiful routing. Soft hoses or elbow joints should be used at turning points. The cable trays should be secured with cable ties, hangers, and angle steels at a spacing of 1 to 1.5 meters. If a metal cable tray is used, it should be grounded at both ends.
3.2.4 For outdoor horizontal wiring, please use a slot every 6 meters under the PVC pipe as a drain to prevent water accumulation inside the pipe.
3.2.5 The wall penetration for the Ethernet cable should be sealed with waterproof and flame-retardant materials.

Caution:
Waterproof Ethernet cables should be with a protective sheath. CAT5e/6 cables are recommended.

3.3 Grounding

PROCET PoE injector PT-PSE105GBSN-D-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.

GND Terminal

2.5 Screw

Grounding Busbar
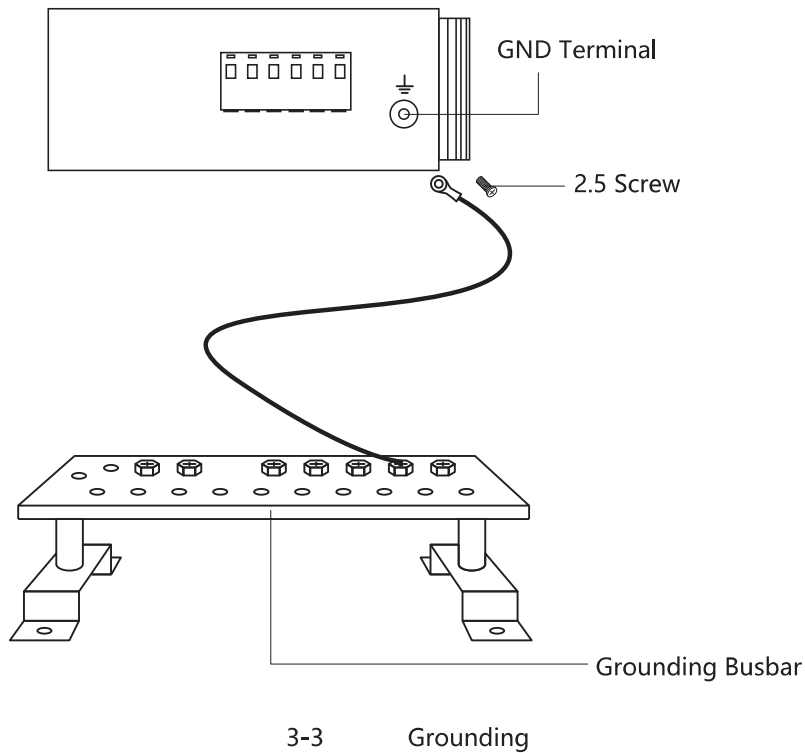
3-3   Grounding

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

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

GND Terminal

2.5 Screw

Ground

Soil

2200
MM
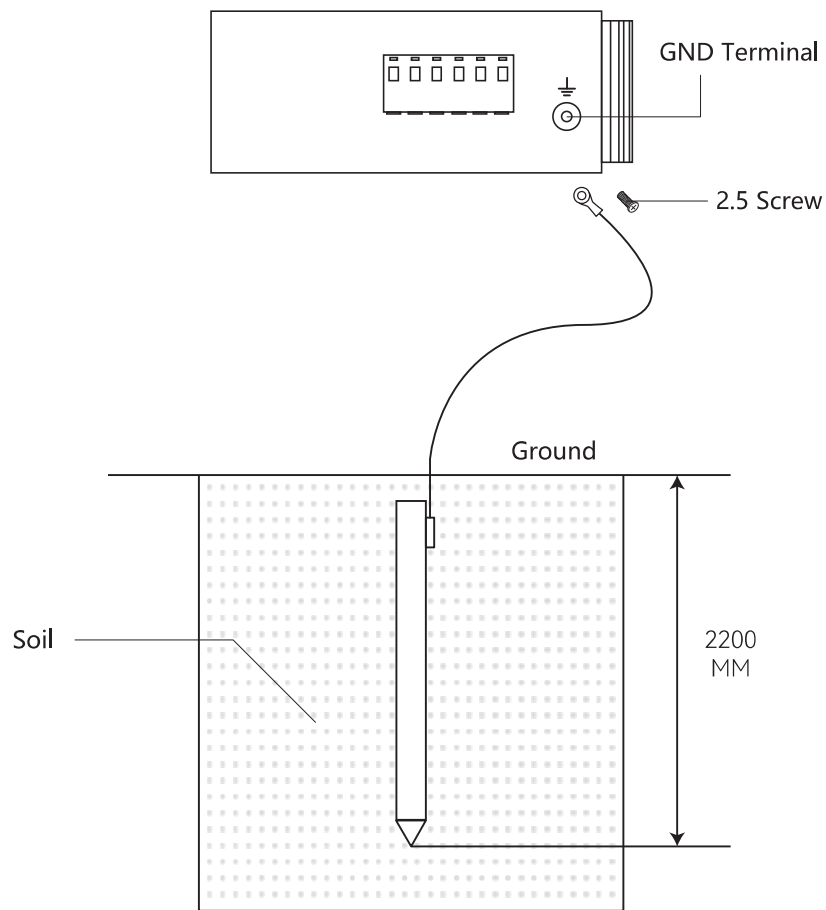
3-4   Simple Grounding

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

PROCET ®

PoE System

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