

POE-OSP+

1/2.5Gbps Multi Gigabit Ethernet PoE Pass-Through Outdoor Surge Protector



User's Guide

FCC Certifications

This Equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CE Mark Warning

This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 class A for ITE, the essential protection requirement of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.



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Unpacking Information

Thank you for purchasing our PoE series products. Before installation, please check that your package contains the following items.

Open the shipping cartons of the unit and carefully unpack its contents. The carton should contain the following items:

1. POE-OSP+ Main Unit x 1
2. 18AWG grounding cable x 1
3. Wall mounting screw set x 1
4. Quick Installation Guide x 1
5. Warranty Card x 1

Hardware Overview

Port link to Protected Device

Link to Line in Port



Wall Mount Holes

Grounding

Introduction

The CERIO POE-OSP+ is an outdoor PoE Pass-through Ethernet Surge Protector provides superior lightning and surge protection over 1 / 2.5Gbps Multi Gigabit networks speeds to provide Power Over Ethernet (PoE) over a single Ethernet cable. It supports 10 kA Impulse Discharge Current guarantees reliable surge protection and provides excellent lightning protection for network PoE and non-PoE devices when transmitting on Multi Gigabit network. The POE-OSP+ provides aluminum enclosure with IP68 rating waterproof durable design are made to withstand harsh environment deployment.

Highlight Features

- Complying with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T and IEEE 802.3bz 2500Base-T standards.
- Supports 1 / 2.5Gbps Multi Gigabit Ethernet speed and Power over Ethernet (PoE) pass through.
- Supports IP68 rating weather-proof durable design are made to withstand harsh environment deployment.
- Load current self-protection mechanism and grounding wire function pulse discharge current protection design.
- Built in grounding pad which can connect to grounding cable to lower clamping voltage for better and more reliable protection and supports 10 kA Impulse Discharge Current
- Supports 2 protection mode : Line-to-Ground and Line-to-Line.
- Protects all Eight(8) pins of the Ethernet cable
- Plug and Play, no software required.
- Supports wall mounting installation

Product Specifications

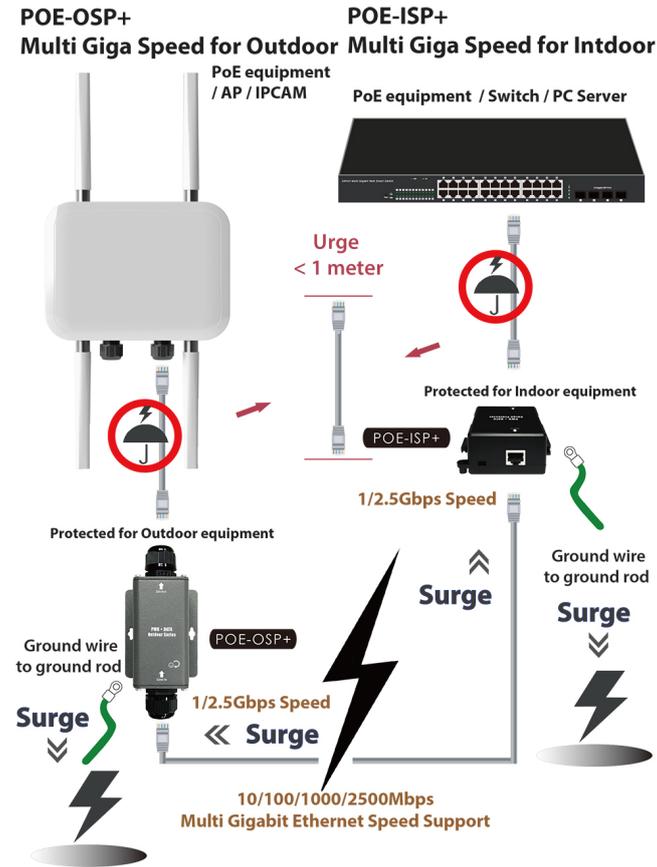
Standards & Hardware Specifications

Standard	IEEE802.3 10BASE-T IEEE802.3u 100BASE-TX IEEE802.3ab1000BASE-T IEEE 802.3bz 2500Base-T IEEE 802.3af/at/bt POE Pass-through
Network Media	10BASE-T: UTP Cat. 3 or up 100BASE-TX : UTP Cat. 5 or up 1000BASE-T: UTP Cat. 5 or up 2500BASE-T: UTP Cat. 5e or up
Data Transfer Rate	10/100/1000/2500Mbps (Half-duplex), 20/200/2000/5000Mbps (Full-duplex)
Clamping Line-to-Ground	20 kV (10/700 us), 600V at 10 kA (8/20 us)
Clamping Line-to-Line	6 kV (10/700 us), 20V at 1 kA (8/20 us)
Data In	Connects PC/HUB/Switch
Ethernet Connector	RJ-45 x1 for Line in RJ-45 x1 for Line out
Surge Protection Design	10KV (After grounding ability)

Environmental & Mechanical Characteristic

PoE Operation Voltage	60 VDC (Max)
PoE Operation Current	Two pair: 0.65A(Max) ,Four pair: 1.3A(Max)
PoE Power Load	74Watt (Four Pair Max)
PoE Input Voltage	44~60V
Operating Temperature	-40° to 85° C
Storage Temperature	-40° to 85° C
Operating Humidity	5% to 90% non-condensing
Storage Humidity	5% to 90% non-condensing
Dimension (W x D x H)	74x165x60mm(Including wall mounting kit)
Weight (Kg)	325g
Case of material	IP68 Rating Weather-proof Alumm casing
Production Location	TW
Supports	IEC/EN 61643-21 (Safety) compatible IEC/EN 61000-4-5 (EMC) compatible
Certifications	IEC 60529 IP68 Rating CE, FCC and RoHS Compliant

Product Application



Connect a ground wire

The unit must be grounded, before connecting the grounding wire size. We recommend using a 12~18 Gauge (AWG) (copper wire diameter) size for the grounding cable.

Ground wiring length 7.5 meters	Please use 18 Gauge (AWG) size
Ground wiring length 15 meters	Please use 16 Gauge (AWG) size
Ground wiring length 30 meters	Please use 14 Gauge (AWG) size
Ground wiring length 60 meters	Please use 12 Gauge (AWG) size



Connect the ground wire

Please refer to the following how to ground the POE-OSP+.

First remove the grounding screw on the side of the unit. Place the ground wire of the connected O-type terminal on the ground screw hole. Insert and tighten the grounding screw firmly to secure the grounding wire and the ring to the device. Connect the other end of the ground wire to a ground rod or your ground source.

Note: Proper installation is required for the grounding wire to achieve its highest surge capability.

Installation

Distance between installations

The cabling distance between the surge protector (POE-OSP+) and the protected device should be less than 1 meter.

The closer the POE-OSP+ is installed to the protection device, the more effective it is for the protection device.

『DEVICE』 Port

This port support transmit up to 74 Watt four pair of PoE power is used for connecting the unit to the outdoor Ethernet device it will be protecting (e.g. PoE access point or PoE IP camera).

『LINE IN』 Port

This port support receive up to 74 Watt four pair of PoE power from that device is used for connecting the unit to the outside network.

Device locked on the wall

Wall Mounting

You can use the packaged screw attachment for installation



Make sure the ground wire is connected to the ground rod.

(The best grounding resistance is below 0.5Ω)