

Quick Start Guide

IP68-Rated Gigabit PoE Outdoor In-Line Surge Protector

Model: B110-SP-CAT-OD2

Este manual está disponible en español en la página de Tripp Lite: tripplite.com/support

Ce manuel est disponible en français sur le site Web de Tripp Lite : tripplite.com/support

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WARRANTY REGISTRATION

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Package Includes

- B110-SP-CAT-OD2 Outdoor In-Line Surge Protector
- 18 AWG Grounding Wire – 1 ft.
- Cable Gland, 8.4 mm Diameter (x3)
- Surface Screw Anchors (x4)
- Surface Mounting Screws (x4)
- Unit Cover Screws (x4)
- Owner's Manual

Product Features

- Protects valuable indoor and outdoor PoE equipment from power surges, lightning, ESD and cable discharge events in unforgiving environments
- Complies with 802.3af, 802.3at and 802.3bt IEEE Standards
- Supports PoE devices up to 90W and Ethernet speeds up to 1 Gbps
- Meets the following IEC Regulations:
 - o IEC 61000-4-2 (ESD) +/- 15kV(Air), +/- 8kV(Contact)
 - o IEC 61000-4-5 (Lightning) 10kA (8/20 μ s), 20kV (8/20 μ s)
- Supports both Mid- and End-Span PoE
- Passive by design – no external power required

Optional Accessories

- N224-Series Cat6 Plenum-Rated Solid-Core Bulk Cable
- N046-000 Punch Down Installation Tool

Mounting Instructions

1. Locate the mounting holes on the bottom of the enclosure, as shown in Figure 1.

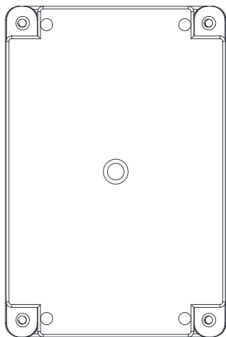


Figure 1

2. Securely mount the bottom portion of the enclosure to the desired outdoor location. Screw hole diameter supports mounting screws up to M3.5.

Metric Cable Gland Assembly



Installation

Protect indoor and outdoor edge network devices like PoE cameras or LAN access points from electrical damage by installing the B110-SP-CAT-OD2 between the source and edge network equipment.

Notes:

- *Maximum cable distance between B110-SP-CAT-OD2 and source is 328 ft. (100 m).*
- *Maximum cable distance between B110-SP-CAT-OD2 and equipment is 328 ft. (100 m).*
- *For best protection performance, the total cable distance in the installation should not exceed 328 ft. (100 m).*
- *The B110-SP-CAT-OD2 must be grounded to function properly.*

Installation

Protecting Edge-Of-Network Equipment

This installation protects your edge equipment from surge, lightning or ESD damage. To protect both the source and edge equipment, refer to section **Protecting Edge-Of-Network Source and Equipment** in this guide.

Note: Use standard size Cat5e, Cat6 or Cat6a cables that feature a wire gauge of 23/24 AWG. Slim category cables are not supported.

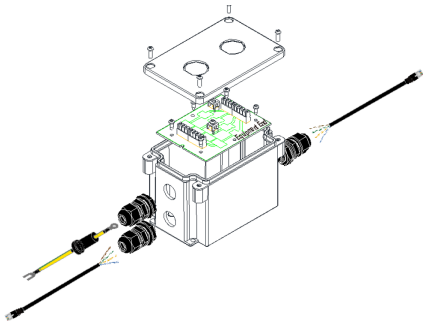
1. Remove both the cap **A** and end nut **E** from one of the cable glands (refer to section **Cable Gland Assembly**).
2. Slide the cap and remaining portion of the cable gland onto both the included grounding wire and bare-wire category cable coming from your source (ex: PoE switch) as shown:



Note: Use standard Cat5e, Cat6 or Cat6a cables with a wire gauge of 23/24 AWG. Slim category cables are not supported.

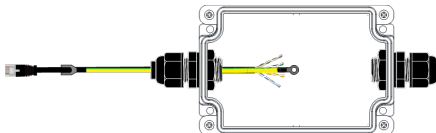
Installation

3. Insert both the grounding wire and the bare-wire end of the category cable in the enclosure, making sure it is inserted on the “cable end” side.



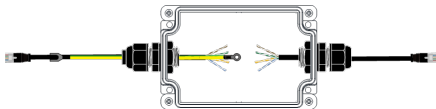
Installation

4. Screw the metric cable gland to the enclosure using the end nut **D** previously removed in step 1. Then, tighten the cap securely onto the cable gland.
5. Using a punch down tool (such as Tripp Lite's N046-000, sold separately), connect the bare wire to the color-coded board inside the enclosure.



6. Repeat Steps 1-3 for the equipment (ex: PoE camera) side of the enclosure without the addition of a grounding wire.

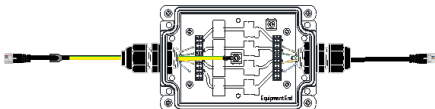
Note: To achieve the best protection performance, the Cat5e/6/6a patch cable between the equipment end of the B110-SP-CAT-OD surge protector and the equipment to be protected must not exceed 300 ft. (100 m).



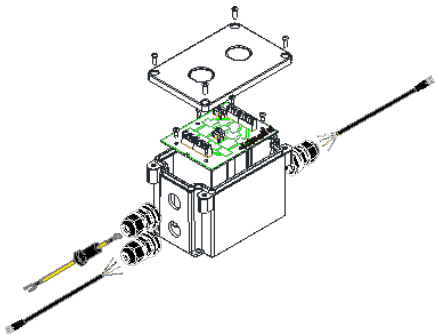
Installation

7. Once both bare wires are connected, secure the PCBA board to the enclosure using the included mounting screws. Then, attach the grounding wire to the available screw on the PCBA board.

Note: Make sure you connect your source to the cable end and your PoE-compliant device to the equipment end.



8. Screw the front cover to the back portion of the enclosure using the included unit cover screws.



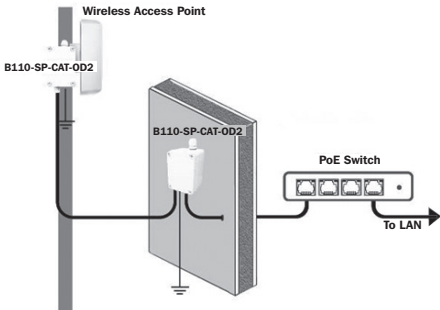
9. The connected PoE device is now protected.

Installation

Protecting Edge-Of-Network Source and Equipment

The previous installation only protects your edge equipment from surge, lightning or ESD damage. To protect both the source and edge equipment, install two B110-SP-CAT-OD2 units in your application. A B110-SP-POE can be installed instead of a second B110-SP-CAT-OD2 to protect the source if the second unit will be installed indoors.

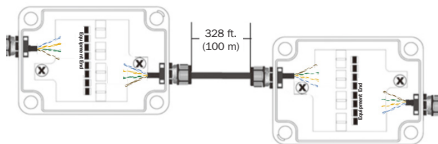
Note: Use standard size Cat5e, Cat6 or Cat6a cables that feature a wire gauge of 23/24 AWG. Slim category cables are not supported. Maximum cable distance between two B110-SP-CAT-OD2 units is 328 ft. (100 m).



1. Install a second B110-SP-CAT-OD2 between the first B110-SP-CAT-OD2 unit and your source following steps 1-3 in **Protecting Edge-Of-Network Equipment** section.

Installation

2. In order to protect both the source and edge equipment, the two B110-SP-CAT-OD2 units need to be wired cable-end to cable-end as shown below.



Specifications

Input / Output Connectors	RJ45 Female
ESD Protection	15kV (Air), 8kV (Contact)
Lightning Protection	10kA (8/20 μ s) / 20kV (8/20 μ s)
Surge Reaction Speed	< 1ns
Operating Temperature Range	-40°F to 158°F (-40°C to 70°C)
Storage Temperature Range	-40°F to 194°F (-40°C to 90°C)
Relative Humidity Range	0 to 95% RH, Non-Condensing
IP Rating	IP68 (Dust-Proof / Water-Resistant)
Network Speed	10/100/1000 Mbps
Max Supported PoE Wattage	90W
IEEE Standards Supported	802.3af, 802.3at, 802.2bt
Span Support	Mid- & End-Span
Material	ABS
Dimensions [H x W x D]	3.2 x 2.8 x 6.5 in. (81 x 71 x 165 mm)
Weight	0.51 lb. (0.23 kg)

Warranty and Product Registration

2-Year Limited Warranty

Tripp Lite warrants its products to be free from defects in materials and workmanship for a period of two (2) years from the date of initial purchase. Tripp Lite's obligation under this warranty is limited to repairing or replacing (at its sole option) any such defective products. To obtain service under this warranty, you must obtain a Returned Material Authorization (RMA) number from Tripp Lite or an authorized Tripp Lite service center. Products must be returned to Tripp Lite or an authorized Tripp Lite service center with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase. This warranty does not apply to equipment, which has been damaged by accident, negligence or misapplication or has been altered or modified in any way.

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Use of this equipment in life support applications where failure of this equipment can reasonably be expected to cause the failure of the life support equipment or to significantly affect its safety or effectiveness is not recommended.

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