

## **Microsemi PD-OUT/SP11**

**Outdoor POE Lightning Surge Protector**

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It is Microsemi's policy to improve its products as new technology, components, software and firmware become available. Microsemi, therefore, reserves the right to change specifications without prior notice.

**Technical Support**

If you encounter problems when installing or using this product, please consult the Microsemi website at:

<http://www.Microsemi.com/powerdsine/support>.

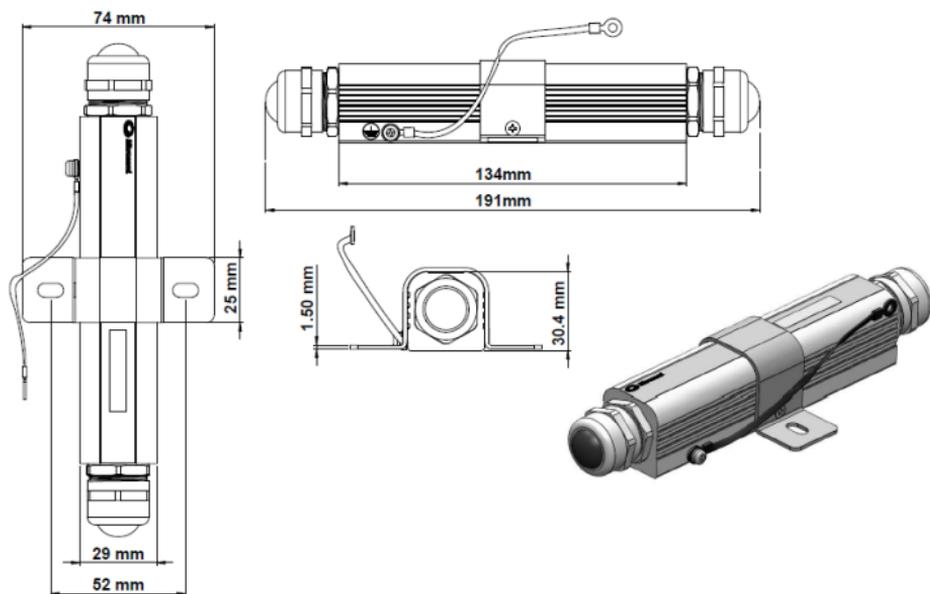
## Product overview

The PD-OUT-SP11 is a high quality surge protection device designed to protect indoor Ethernet networks from lightning that may come from the outdoor environment through the Ethernet Cable. The product is enclosed in an aluminum weatherproof enclosure, meeting IP66 and fits a nominal 7.25mm diameter of outdoor cable. It can be easily mounted on a wall or a pole. The SP device can be installed in the entrance to the building to protect the indoor network or on a pole close to the outdoor device (WLAN AP, IP Cam, etc.) to protect it.

## Standards and Approvals:

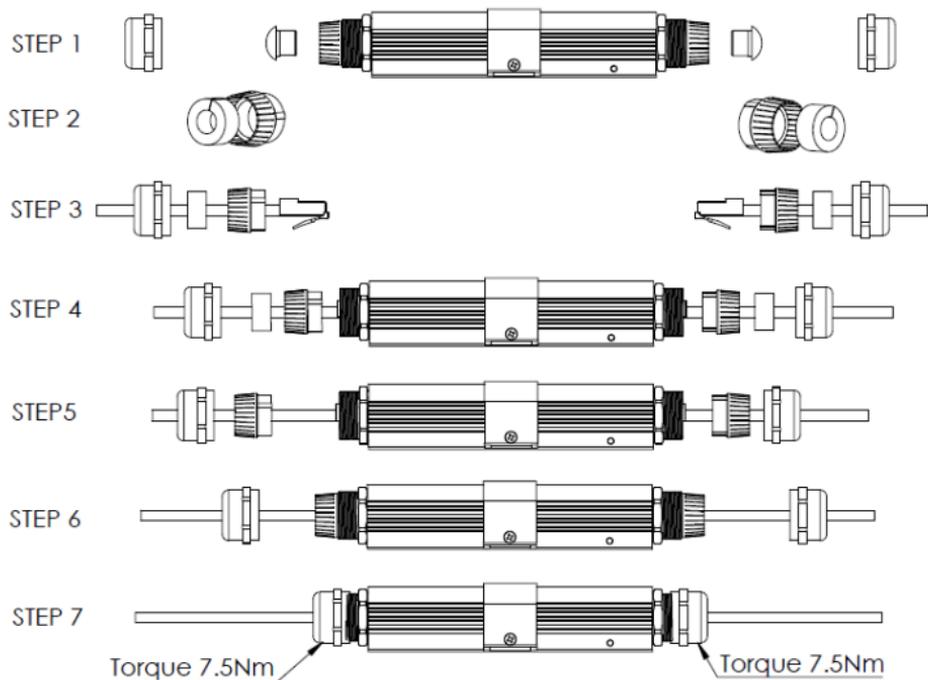
- UL497B
- RoHS Compliant
- WEEE Compliant
- REACH Compliant
- Dust & Water Intrusion
  - IEC60529, level IP66
  - NEMA 250, level 4x

**Product View and Dimensions**



**Figure 1**

### Unit preparation



**Figure 2**

## Mounting Instructions

### Installation

Note: Typical installation requires mounting and grounding two surge protector units. One as close as possible to the outdoor unit, the other one in the entrance point to the indoor building.

#### Installing the surge protector close to the outdoor unit

Instructions:

1. Disassemble the mounting OMEGA bracket by unscrewing both of its screws.
2. Mount the Surge Protector on the pole close to the outdoor unit using a worm gear clamp (not supplied) see Figure 3 for instructions.
3. Follow gland preparation instruction steps at Unit preparation section.
4. Ground the Surge Protector unit using the GND screw.

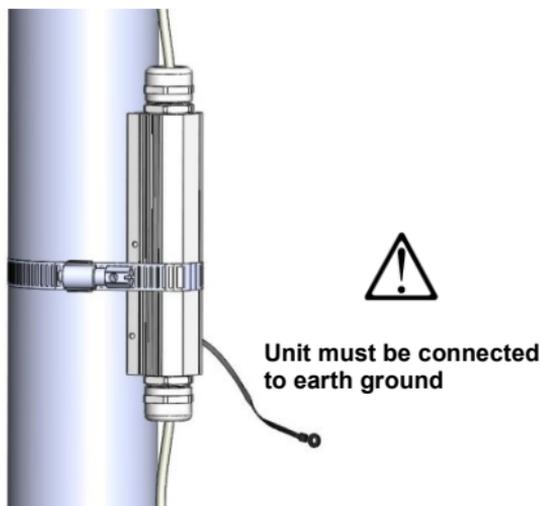


Figure 3

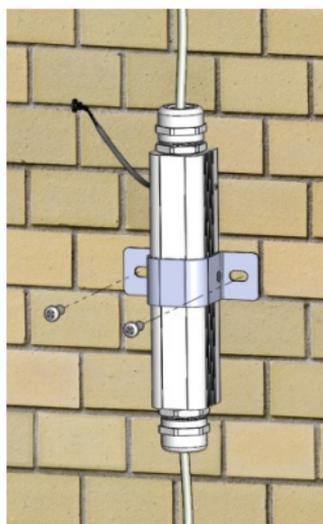
## Installing the surge protector outside and close to the indoor unit

Instructions:

1. Mount the Surge Protector outside on the wall and close to the indoor unit using the mounting OMEGA bracket, see Figure 4 for instructions.
2. Follow gland preparation instruction steps at Unit preparation section.
3. Ground the Surge Protector unit using the GND screw.



**Unit must be connected  
to earth ground !**



**Figure 4**

**Troubleshooting**

<b>Symptom</b>	<b>Corrective Steps</b>
<i>The PD does not operate</i>	<ol style="list-style-type: none"><li data-bbox="366 251 840 302">1. Ensure the input connector has been assembled properly.</li><li data-bbox="366 307 886 358">2. Verify you are using an outdoor Category 5/5e/6, four-pairs straight-wired cable.</li></ol>
<i>The end device operates, but there is no data link</i>	<ol style="list-style-type: none"><li data-bbox="366 436 868 543">1. Verify that for this link, you are using an outdoor UTP/FTP Category 5 straight (non-crossover) cabling, with all four pairs.</li><li data-bbox="366 547 871 598">2. Verify Ethernet cable length is less than 100 meters from Ethernet source to SP.</li></ol>



### **Recycling and Disposal**

Disposal instructions for old products. The WEEE (Waste Electrical and Electronic Equipment) national environmental initiatives have been put in place to ensure that products are recycled using best available treatment, recovery and recycling techniques to ensure human health and high environmental protection. Your product is designed and manufactured with high quality materials and components, which can be recycled and reused. Do not dispose of your old product in your general household waste bin. Inform yourself about the local separate collection system for electrical and electronic products marked by this symbol:

Use one of the following disposal options :

- Dispose of the complete product (including its cables, plugs and accessories) in the designated WEEE collection facilities.
- If you purchase a replacement product, hand your complete old product back to the retailer. He should accept it as required by the national WEEE legislation.

## Specifications

### Environmental Specifications

Mode	Temperature	Humidity
Operating / storage	-40°C to 85°C (-40°F to 185°F)	10 to 95% (no condensation allowed)

### Electrical Specifications

Breakdown voltage	Poe (4,5,7,8): 90-180V Poe (1,2,3,6): 90-180V Line-earth (all 8 lines) 70-120V
Lines protected	1-8 on modular jack

### Interface

Input: Ethernet 10/100/1000Base-T	RJ45 female socket
Output: Ethernet 10/100/1000Base-T	RJ45 female socket

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### **Ordering information:**

- *Product Name:* **Microsemi PD-OUT/SP11**
- *Part Number:* **PD-OUT/SP11**
- *Description:* **Outdoor POE lightning surge protector**

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