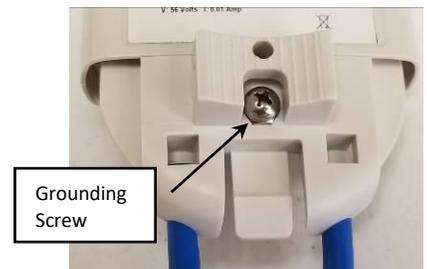


TP-ESP-71G Install Guide

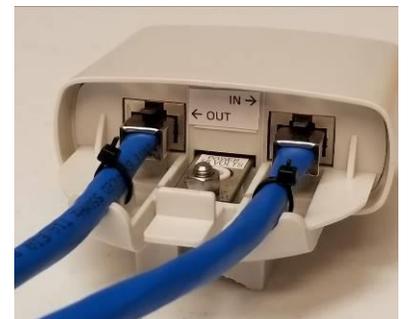
1. The TP-ESP-71G is a high performance Outdoor Rated Ethernet surge protector / gas discharge lightning arrester to help protect sensitive equipment from power surges caused by lightning and grid power fluctuations. They protect on all 4 pairs and are compatible with up to 1Gbps Ethernet networks.
2. The surge protectors are an isolated design to further enhance their protection ability by isolating the input and output connectors with 2 KVDC isolation. An added benefit of the isolated design is that they can be used in positive or negative grounded systems.
3. The input is 802.3af/at PoE compatible and also accepts 23V to 59V passive PoE so they can be used in a variety of different applications. Output is -48V 13W PoE with power supplied per Mode B on pins 4,5- and 7,8+.
4. The enclosure is UV resistant and weatherproof. It can be mounted to a pole using tie-wraps or to a wall with screws. Cable feedthroughs offer a cable strain relief feature using tie-wraps.

5. Installation:

- a. Use **shielded** CAT5/6 cable for best results.
- b. Using the ground screw on the unit, use a piece of 16AWG or larger wire to ground the unit to an earth ground.
- c. Mount the unit to a pole using the large tie wraps that are included in the package or to a wall using the included screws. Trim any extra tie wrap material.
- d. Plug the PoE input cable to the right hand connector and the PoE output cable to the left hand connector.



- e. Using the small tie wraps included in the package secure the cables by tightening the tie wrap on the cable. This will help to strain relieve the CAT5/6 cables. Trim any excess tie wrap material.
- f. Install the bottom cover by snapping into place .



6. Specifications

| | TP-ESP-71G |
|---|--|
| Input | 802.3af/at POE or 23–59VDC Passive PoE |
| Output | Passive PoE (-48V 0.27A 13W) |
| Load Regulation | 5% |
| Ripple and Noise | 1% |
| ESD Protection (IEC61000-4-2) | +/-15kV (air), +/-8kV (contact) |
| EFT Protection (IEC61000-4-4) | 40A (5/50ns) |
| Lightning Protection (IEC61000-4-5) | 20A (8/20us) |
| Clamping Voltage | 16V pins 1,2,3,6 75V pins 4,5,7,8 |
| Peak Pulse Current | 20A (8/20us) |
| Protection Mode | Differential Mode |
| Overcurrent Protection | 120% ~ 160% of Full Load (13W) |
| Input Polarity Protection | Yes |
| Efficiency | >80% |
| Capacitance (line to line) | < 1.5 pF |
| Data Rate | 10/100/1,000 Mbps (1Gbps) |
| Operating Temperature | -40 to +60°C (-40 to + 140°F) |
| Storage Temperature | -40 to +80°C (-40 to +176°F) |
| Operating Humidity | Weatherproof, Outdoor Rated (IP65) |
| Size (L x W x H) | 4.5 x 3.5 x 1.75" (114 x 89 x 44.5mm) |
| Weight | 6.5oz (184g) |
| Connectors | RJ45 Shielded Jacks Qty 2 |
| Ethernet Cable Compatibility | CAT5/6 |
| Safety Standards | Meets UL1950, CSA 22.2, TUV EN60950 |
| EMC Standards | Meets FCC Class B and EN55022 Class B |
| MTBF (Mean Time Between Failure) | 103,111 Hours |
| Warranty | 3 Years |