



global solutions :  
local support™

## Network Lightning/Surge Protector 7.5V/70V Clamp Voltage

The ESP series of surge protectors are rugged and effective surge protectors for Ethernet based systems. They provide a high level of protection against power surges caused by lightning and other causes. These surge protectors are used to protect expensive equipment from damage caused by electrical surges. They should be mounted as close to the protected equipment as possible. The all metal cast aluminum enclosure and shielded RJ45 connectors provide for good EMI noise suppression. The integral mounting feet can be screwed to a metal chassis to provide proper grounding or as an alternative, there is an integral ground wire provided which can be connected to a ground for those systems that require a single point ground connection. They are designed to be used indoors or outdoors, if inside a waterproof enclosure. The ESP series are compatible with 100Mbps data and 48V POE systems. Protection is provided on all 8 ethernet pins (7.5V clamping on Data pins 1,2,3,6 and 70V clamping on POE pins 4,5,7,8).

For sales information:

Telephone 800-323-3757

E-Mail [sales@pacwireless.com](mailto:sales@pacwireless.com)

or visit: [www.pacwireless.com](http://www.pacwireless.com)

### Features and Benefits:

- 100Mbps data rate
- Compatible with 48V power over ethernet systems
- 7.5V Data / 70V POE clamping voltage
- 10KA surge discharge current
- CAT5 and CAT5e compatible. All 8 pins protected.
- Integral mounting feet and separate ground wire
- Shielded RJ45 jacks and metal enclosure for EMI noise suppression
- Complies with IEC 61643-21 standard
- Compact and rugged design

### Applications

- Routers, access points and bridges
- Wimax systems
- Remote networking equipment
- Point of sale systems
- SOHO equipment
- IP phone systems
- Industrial control systems
- IP camera systems

## Specifications

|                             |  |
|-----------------------------|--|
| Operating Voltage           | Data 5V ; POE 48V                                  |
| Clamping Voltage            | 7.5V Data (Pins 1,2,3,6)<br>70V POE (Pins 4,5,7,8) |
| Max Surge Discharge Current | 10KA (8/20uS)                                      |
| Peak Pulse Current          | 100A (10/1000uS)                                   |
| Pins Protected              | All 8 Pins   |
| Protection Mode             | Differential & Common Mode<br>L-L, L-G             |
| Insulation Resistance       | >1000 M Ohm  |
| Max Shunt Capacitance       | <25pF  |
| Data Rate                   | 100 Mbps   |
| Response Time               | <5 nS  |
| Operating Temperature       | -20 to +60 C                                       |
| Storage Temperature         | -20 to +80 C                                       |
| Operating Humidity          | 0% to 95% non condensing                           |
| Size (L x W x H)            | 2.7" x 1" x 1" (68 x 25.4 x 25.4mm)                |
| Size (overall)              | 3.2" x 1" x 1" (82 x 25.4 x 25.4mm)                |
| Weight                      | 2.4oz (68 g)                                       |
| Ground Wire                 | 16 AWG , 10" (26cm) long                           |
| Connectors                  | RJ45 Shielded Jacks                                |



### Compliance:

|           |                      |
|-----------|----------------------|
| IEC       | 61000-4-5 , 61643-21 |
| IEEE/ANSI | C62.45               |

## System Ordering:

ESP-100-POE Network lightning/surge protector, LAN/POE 7.5/70V clamp

## Notes:

- All shipments F.O.B. Schaumburg, IL 60173
- All antennas carry a 2 Year Warranty

Any information furnished by Laird Technologies and its agents is believed to be accurate and reliable. Responsibility for the use and application of Laird Technologies materials rests with the end user since Laird Technologies and its agents cannot be aware of all potential uses. Laird Technologies makes no warranties as to the fitness, merchantability, or suitability of any Laird Technologies materials or products for any specific or general uses. Laird Technologies shall not be liable for incidental or consequential damages of any kind. All Laird Technologies products are sold pursuant to the Laird Technologies domestic terms and conditions of sale in effect from time to time, a copy of which will be furnished upon request.

*Specifications subject to change without notice.*



global solutions :  
local support™