



### 7.5V/70V CLAMP VOLTAGE SURGE PROTECTOR

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).

### FEATURES

- 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

### MARKETS

- 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

### global solutions: local support.™

Americas: +1.847.839.6907  
IAS-AmericasEastSales@lairdtech.com

Europe: +1.32.80.7866.12  
IAS-EUSales@lairdtech.com

Asia: +1.65.6.243.8022  
IAS-AsiaSales@lairdtech.com

[www.lairdtech.com](http://www.lairdtech.com)



Specifications	
Operating Voltage	Data 5V ; POE 48V
Clamping Voltage	7.5V Data (Pins 1,2,3,6) 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 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	
Operating Voltage	Data 5V ; POE 48V
Clamping Voltage	7.5V Data (Pins 1,2,3,6) 70V POE (Pins 4,5,7,8)

**SYSTEM ORDERING INFORMATION**

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

**NOTES**

- All shipments F.O.B. Schaumburg, IL 60173

ANT-DS-ESP-100-POE 0410

Any information furnished by Laird Technologies, Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. 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' Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2010 Laird Technologies, Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Technologies Logo, and other marks are trade marks or registered trade marks of Laird Technologies, Inc. or an affiliate company thereof. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird Technologies or any third party intellectual property rights.