# SP-POE-01

## Power Over Ethernet 1-Port Surge Protector

The SP-POE-01 is a single port, Ethernet surge protector designed to protect all 8 lines used in a standard CAT5e cable. The product is compatible with 10/100Base-T(X) networks and 48V Power-over-Ethernet systems. The Standard 802.11af allows the methods of implementing PoE: The SP-POE-01 applies data to the pairs (pins 1/2 and pins 3/6) and power to the unused pairs (pins 4/5 and pins 7/8). The SP-POE-01 offered protection is provided on all 8 Ethernet pins (6.8V clamping on Data pins 1,2,3,6 and 53V clamping on POE pins 4,5,7,8). Network connections are made via standard female RJ45 connectors. Grounding is accomplished via a ground wire.

### Features

- 10/100Mbps data rate
- Compatible with 48V power over Ethernet systems
- 6.8V Data / 53V PoE clamping voltage

- 5KA surge discharge current
- CAT5 and CAT5e compatible. All 8 pins protected.
- Integral mounting feet and separate ground wire (SP-POE-16, SP-POE-24)
- Shielded RJ45 jacks and metal enclosure for EMI noise suppression

### Specifications

| | |
|---|---|
| Voltage | Data 5V ; PoE 48V |
| Clamping Voltage | 6.8V Data (Pins 1,2,3,6) 53V PoE (Pins 4,5,7,8) |
| Max Surge Discharge Current | 5KA (8/20uS) |
| Peak Pulse Current | 100A (10/1000uS) |
| Pins Protected | Data : 1, 2, 3, 6        PoE : 4, 5, 7, 8 |
| Insulation Lost | < 0.5dB (10Mbps) |
| Data Rate | 10/100 Mbps |

| | |
|---|---|
| Response Time | line/line <1 ns;  line/ground < 100ns |
| Operating Temperature | -20 ~ +75°C |
| Storage Temperature | -40 ~ +85°C |
| Operating Humidity | 0% ~ 95% non condensing |
| Dimensions (D x W x H) | 38 x 106 x 26 mm (1-port) |
| | 73 x 143 x 44 mm (8-port) |
| | 73 x 483 x 44 mm (16/24-port) |
| Weight | 75 g (1-port), 435g (8-porte), 1.4kg (16/24-port) |
| Certification | IEC 61643-21:2000 |

### Ordering Information

| Model Name | Description |
|---|---|
| SP-POE-01 | 1-port RJ45 10/100Base-TX PoE Ethernet Surge Protector (Data: 1,2,3,6. PoE: 4,5,7,8) |
| SP-POE-24 | 24-port RJ45 10/100Base-TX PoE Ethernet Surge Protector (Data: 1,2,3,6. PoE: 4,5,7,8) |

SP – POE – □□

Example: SP – POE – 01

# SP-GPOE-01

## Single Port, Gigabit Ethernet PoE Surge Protector

The SP-GPOE-01 is a single port, Gigabit Ethernet PoE surge protector designed to protect all 8 lines used in a standard CAT5e cable. The product is compatible with 1000Base-T networks and 48V Power-over-Ethernet systems. The Standard 802.11af allows the methods of implementing PoE: The SP-GPOE-01 applies data to the pairs (pins 1/2 and pins 3/6) and power to the unused pairs (pins 4/5 and pins 7/8). The SP-GPOE-01 offers protection is provided on all 8 Ethernet pins (6.8V clamping on Data pins 1,2,3,6 and 63V clamping on POE pins 4,5,7,8). Network connections are made via standard female RJ45 connectors. Grounding is accomplished via a ground wire.

### Features

- 1000Mbps data rate
- Compatible with 48V power over Ethernet systems
- 63V PoE clamping voltage

- 1.5KA 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

### Specifications

| | | |
|---|---|---|
| Operating Voltage | UN | 63V |
| Max. continuous operating voltage peak current line to line (8/20us) | Imax | 1.5KA |
| Max. continuous operating voltage peak current line to ground (8/20us) | Imax | 1.5KA |
| Voltage protection level (line to line) | UP | ≤ 120V |
| Voltage protection level (line to ground) | UP | ≤ 120V |
| Insulation Loss | | < 0.5dB |

| | |
|---|---|
| Data rate | 1000Mbps |
| NM Surge response time | ≤ 1ns |
| Connector | RJ45 |
| Data lines protected | 1-8 |
| Operating Temperature | -40 ~ 80°C |
| Dimensions | 38 x 106 x 26mm (D x W x H) |
| Certification | IEC 61643-21:2000 |



IN — Network line        OUT — Patch cable — Network equipment

SP-GPOE-01

Ground

### Ordering Information

| Model Name | Description |
|---|---|
| SP-GPOE-01 | Single Port,  1000Base-T GE PoE Surge Protector |

Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.

**14-1**  SP-POE-01, SP-GPOE-01        www.ctcu.com        CTC UNION TECHNOLOGIES CO., LTD.