

LPS[®] PoE-8/48

SURGE PROTECTIVE DEVICE



Protects Power over Ethernet (PoE) equipment against lightning induced surges



PoE (Power over Ethernet) technology is fast gaining popularity because it simultaneously transmits data as well as supply DC power by simply using Ethernet cables (Cat 5e or Cat 6). This convenient method simplifies wiring while saving the overall cabling cost.

The LPS[®] PoE-8/48 is specially designed to provide protection for equipment using 8-wire PoE technology.

The LPS[®] PoE-8/48 complies with IEEE 802.3 bt Type 4 Standard to protect 4 pairs or 8 wires Cat 5e or Cat 6 cables. They provide protection for all modes against lightning induced surges successfully without impairing the system's operation or causing excessive in line resistance. These devices are specially designed with high surge capacity to suit even the most lightning prone regions in the world.

How it works

The LPS[®] PoE-8/48 provides unsurpassed performances in lightning surge protection. It deploys multi-stage protection with GDT (Gas Discharge Tube) for primary defence. It is then linked to a second stage surge attenuation component and finally to a voltage dependant device.

When a transient surge occurs, the LPS[®] PoE-8/48 surge protective device will switch to a fully conductive state to divert high current. It will then reset automatically to a non-conducting state when the current falls below the holding current. Under excessive surge conditions, these devices will generally fail in shorted mode to earth to keep the circuit protected.

For more effective protection, we highly recommend that the LPS[®] PoE-8/48 be installed at both ends of a cable, especially when the connecting equipment is located 30 metres away, in an adjacent building or outdoors. Any SPDs added to the cable will contribute some signal loss. In order to compensate the signal loss, it is recommended to reduce the maximum allowable cable length of the type of signal by 30%. All equipment and SPD earth must be linked to the system's common earth.

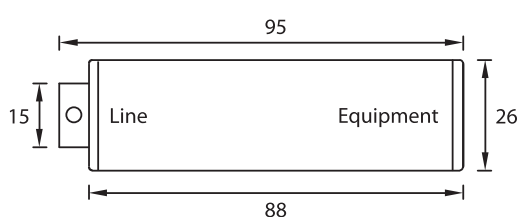
HIGHLIGHTS

- ▶ **It protects Ethernet signals with 48 V DC power supply circuits**
- ▶ **It has a multi-stage hybrid protection system**
- ▶ **It provides full mode protection for both common and transverse modes of surges**
- ▶ **It has a fail-safe metal enclosure**

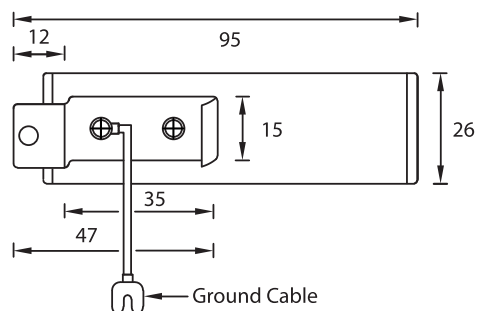
Technical Specifications

Technical Data	PoE – 8/48
Protected Wires	8
Nominal Operating Voltage	±48 V
Maximum Operating Voltage	±65 V
Standard Clamp Voltage @ 1 mA	82 V (Line to Line)
Let-through Voltage @ IEC 61643-21	90 V (Line to Line) @ C ₃ 135 V (Line to Earth) @ D ₁
Maximum Surge Current @ 8/20 μs per wire	10 kA (Line to Earth)
Complied Standard	IEEE 802.3 bt Type 4
Earth Polarity	Floating
Maximum Loading Current – Total	2A
– 3db Bandwidth @ 600 Ω Circuit	From DC to 20 MHz
– 3db Bandwidth @ 110 Ω Circuit	From DC to > 150 MHz
Insertion Loss @ 300 kHz	< 0.1 db
Maximum Shunt Capacitance	< 30 pF
Protection Modes	Common and Transverse Modes
Connector Interface – Line and Equipment	RJ45
Operation and Storage Temperatures	– 40° C to 70° C
Method of Mounting	35 mm Din Rail / Panel Mount
Cable Type	UTP/STP
Weight	100 g
Warranty	5 years

Dimensions



Top View



Back View

All dimensions in millimetres

All the above specifications are subjected to changes without prior notice.
Customised products are available upon request.

Awarded the National Mark of
Malaysian Brand 2015



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