TYCON Power®

INDUSTRIAL STRENGTH

TP-ESP-10G-POE

DATA SHEET

Ethernet Surge Protector

Features

- **10/100/1,000/10,000Mb (10G) Data Rate**
- **CAT5, CAT5e, CAT6, CAT6a Compatible.**
- **802.3af, 802.3at, 802.3bt and Passive PoE Compatible**
- **PoE, PoE+ and PoE++ Compatible**
- **Shielded RJ45 Jacks and Full Metal Housing**
- **Industrial strength operating range to 90C**
- **Over-Current Protected**
- **Complies with IEC 61000-4-5 Standard**
- **UL497B Listed**

Applications

- **Wireless Access Points and Client Devices**
- **IP Phone and Security Camera Systems**
- **Industrial Control Systems**

Description

The TP-ESP-10G-POE are a high performance Ethernet surge protector to help protect sensitive equipment from surges caused by lightning and grid power fluctuations. They protect to an impressive 10KA and are compatible with up to 10Gbps Ethernet networks. The surge protectors are also compatible with IEEE802.3af/at/bt PoE standards.

They have a full metal body for improved EMI suppression and have integral mounting feet and separate ground wire. Incorporating a rugged design, they are perfect for indoor or outdoor use inside a weatherproof enclosure. The TP-ESP-10G-POE is compatible with 10/100/1,000M/10,000M POE systems up to 58V and can also be used successfully in pure data systems without PoE . Common mode and Differential Mode Protection is provided on all 8 Ethernet wires.
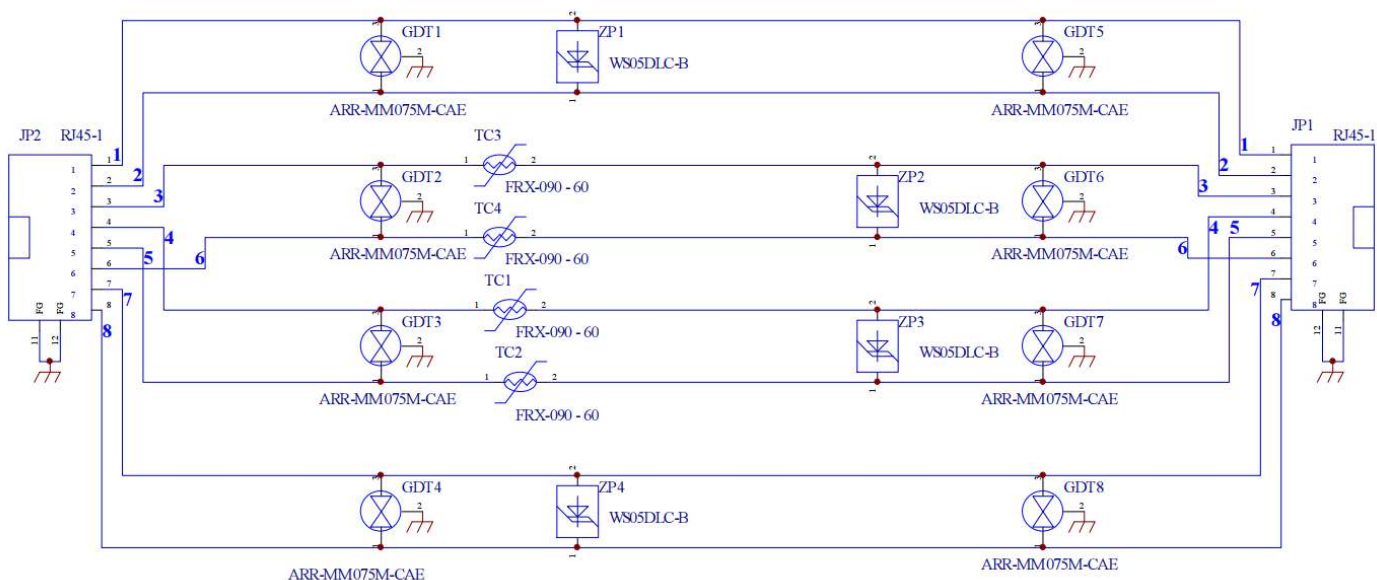
A ground wire is included to tie into the user's earth ground system. Surge protectors should be mounted as close to the protected equipment as is feasible. Tycon offers a small outdoor enclosure to weatherproof the surge protector. There is also a DIN rail mounting kit available for DIN rail mounting the surge protector.

Specifications

	TP-ESP-10G-POE
Operating Voltage	POE < 58V
Operating Current	2.5A
Clamping Voltage	70V POE (All 8 Pins)
Max Surge Discharge Current	10KA (8/20us, 10 times with 3 mins interval)
Peak Pulse Current	100A (10/1000us, 300 times with 3mins interval)
Protection Mode	Differential & Common Mode
Insulation Resistance	>10,000 MOhm
Capacitance (line to line)	< 3 pF
Data Rate	10/100/1,000/10,000 Mbps (10Gbps)
Operating Temperature	-40 to +90°C

TP-ESP-10G-POE

Storage Temperature	-40 to +125°C
Operating Humidity	0% to 95% non condensing
Size (L x W x H)	4.7 x 1 x 1" (120 x 25.4 x 25.4mm)
Weight	2.8oz (80g)
Ground Wire	14 AWG, 10.8" (275mm) long
Connectors	RJ45 Shielded Jacks
Ethernet Cable Compatibility	CAT5, CAT5e, CAT6. CAT6a
IEC Standard	61000-4-5
UL Standard	497B
MTBF (Mean Time Between Failure)	1,414,941 Hours
Warranty	3 Years

Schematic

System Ordering:

TP-ESP-10G-POE   10Gbps 10KA Network Lightning/ Surge Suppressor

For further information contact:

Tyconsystems.com

RoHS compliant

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