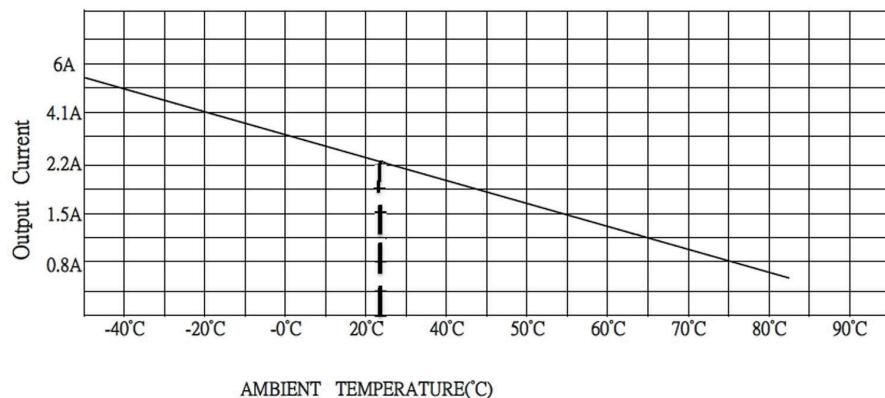
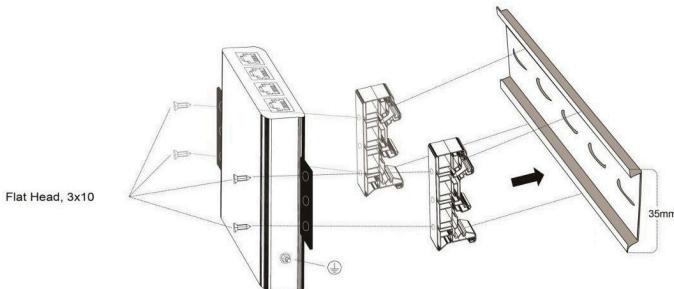


Performance:

RATING TEMPERATURE LIMITS AND OUTPUT CURRENT RANGE

**Operation & Setup:**

1. For best results , place the Surge Protector as close to the protected equipment as feasible.
2. Each port pair are separate and have no polarity. It is suggested to connect the protected equipment Ethernet cable to the "a" side as shown in the picture to the right. Connect the other side ("b") to the Ethernet cable coming from the source.
3. Use CAT5e or better Ethernet cable for Gigabit speeds. Use CAT6 or better for 10G speeds.
4. Connect the screw stud on the side of the housing to Earth Ground using a 14AWG or larger wire. One method is to connect the surge protector stud to a metal pole or housing using a short ground wire and then connecting the bottom of the pole to Earth Ground using a 1m or longer copper rod. The important thing is to have a good low resistance path to Earth Ground for best surge protection.
5. The housing has metal tabs on either side for mounting to a wall or DIN rail using the included DIN Rail Adapters.

**10G 4 Port Ethernet Surge Protector**

Powering your network infrastructure with efficiency and precision

**USER MANUAL****TP-ESP-10Gx4**

www.tyconsystems.com



Tycon® 16 Port Gigabit 802.3at PoE+ Managed Injector

Description

The TP-ESP-10Gx4 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-10Gx4 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. The device has 4 separate ports to protect 4 devices in the field. The ports have no polarity so ports can be assigned as desired. Each port on one end of the device is connected to the corresponding port on the other end of the device.

A ground wire is included to tie into the user's earth ground system. DIN Rail adapters are also included. 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.

Features

- 10/100/1,000/10,000Mb (10G) Data Rate
- CAT5e, CAT6, CAT6a Compatible.
- 802.3af, 802.3at, 802.3bt and Passive PoE Compatible
- PoE, PoE+, UPoE, PoE++ and PoH Compatible
- Shielded RJ45 Jacks and Full Metal Housing
- Industrial strength operating range -40C to 85C
- Wall and DIN Rail mounting
- 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

Specifications:

	TP-ESP-10Gx4
Operating Voltage	POE < 58V
Operating Current	2.2A (each pair) @ 25°C
Clamping Voltage	75V 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
Response Time	0.65us typical
Insulation Resistance	>10,000 MOhm
Capacitance	< 3 pF
Data Rate	10/100/1,000/10,000 Mbps (10Gbps)
Operating Temperature	-40 to +185°F (-40 to +85°C)
Storage Temperature	-40 to +185°F (-40 to +85°C)
Operating Humidity	0% to 95% non condensing
Size (L x W x H)	4.3 x 4.3 x 1" (110 x 110 x 25mm)
Weight	13.6oz (385g)
Ground Wire	14 AWG, 10.8" (275mm) long
Connectors	RJ45 Shielded Jacks
Ethernet Cable Compatibility	CAT5e, CAT6, CAT6a
IEC Standard	61000-4-5
UL Standard	497B
MTBF (Mean Time Between Failure)	1,414,941 Hours
Warranty	3 Years