

# TW-SPPOE-TS

## Over Voltage Protection

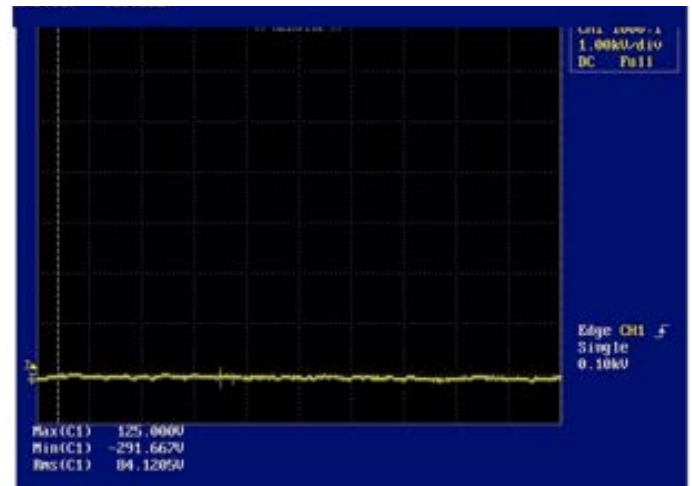
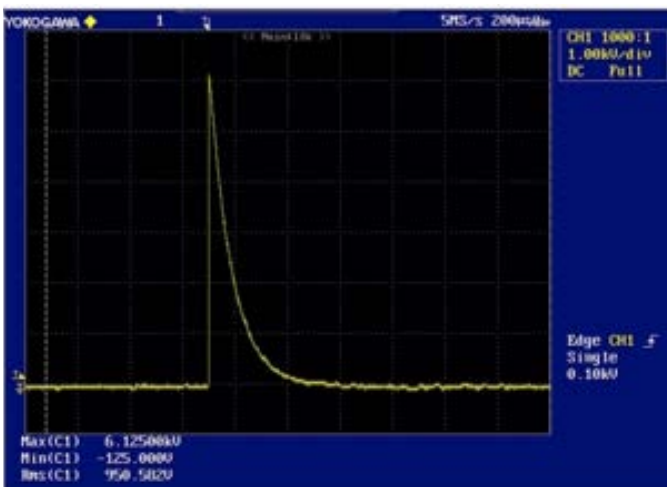


Gigabit Eth  
8 Pin  
Protection

PoE  
compatible  
IP68

### Gigabit Over Voltage & Surge Protection

The TW-SPPOE-TS will protect any Ethernet device from surge events (electrostatic discharges, voltage spikes, etc.) that may cause overvoltage on the cable. This unit is perfectly compatible with 802.3af/at and standard PoE systems and with reverse polarity systems. TW-SPPOE-TS is especially suitable for appliances installed in unprotected sites, such as isolated towers and long cable runs. Its use is advised with appliances that must guarantee high reliability, such as devices installed in difficult locations or when the grounding of the appliances is not done correctly.



### Three stage protection

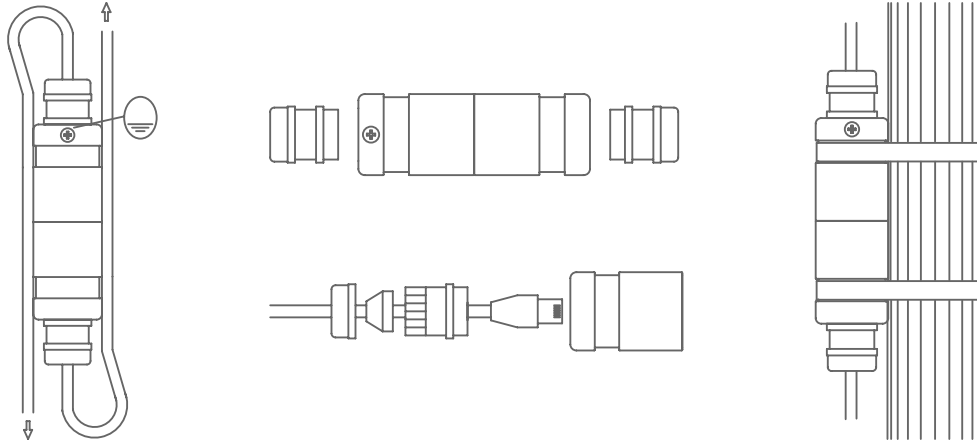
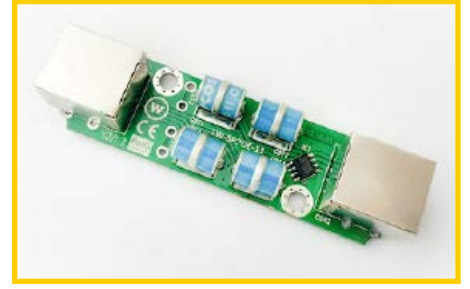
Being constituted of surge protectors, line protectors and a system that avoids peak currents, the TW-SPPOE-TS offers maximum protection to your appliances and its very small. Great care has been taken in shielding the unit and in defining the data line path in order to avoid packet loss even when the packets are quite large (up to 64.000 bytes).

The TW-SPPOE-TS is CE compliant and is certified by IMQ according to the IEC61000-4-5 regulation up to 6000 Volts. Its use is permitted with medical equipment.

- ▶ **Three-Stage protection**
- ▶ **Gigabit Ethernet compliance**
- ▶ **Failsafe architecture**
- ▶ **Power Over Ethernet (PoE) compatible**
- ▶ **Support normal and reverse polarity PoE**
- ▶ **Power and Signal line protection**
- ▶ **Common mode protection**
- ▶ **Line to ground differential**
- ▶ **High energy, High speed capabilities**
- ▶ **Low shunt capacitance**
- ▶ **All 8 Pins protected**

## Installation

We suggest to mount the surge protector on the mast or on the tower, right under the appliance that must be protected. Connect both the appliance and the surge protector to the ground. Grounding the surge protector is very critical and it must be set accurately: keep the ground cable as short as possible between the base of the device and the equipotential spot. TW-SPPOE-TS can also be mounted into an outdoor weatherproof enclosure. It may be used also to protect any Ethernet devices (with and without PoE), such as IP cameras, VoIP telephones, Access Points, PC, etc.



## Benefits:

- ▶ PoE Power line protection
- ▶ Resistance to at least 300 atmospheric discharges with current higher than 200 Ampere and up to 1 millisecond
- ▶ Resistance to at least 10 atmospheric discharges with current higher than 20 thousand Ampere and up to 20 microseconds
- ▶ Data line protection
- ▶ Independent protection system for each data line
- ▶ Thanks to the double stage protection system, this device has no limitation of durability for peak discharges up to 50Watts
- ▶ Output impulses always lower than 150Volts (certified)
- ▶ Load peak current limitation system
- ▶ No performance loss on local network: unlike other similar devices, this surge protector does not cause any packet losses when connected to the Ethernet cable, even if the cable is very long
- ▶ All components have a high resistance to extreme temperatures (-40; +90 °C)
- ▶ CE Tested and certified. Tested by IMQ on long impulses at 6000 Volts
- ▶ RoHS/REACH compliant
- ▶ A Test Report under critical conditions is available upon request.

## Physical Dimension

Length (cm)	16
Diameter (cm)	4
Weight (Kg)	0.3
Cable Acceptance diameter (mm)	3-10 (EPDM cutting seal)

## Materials

Board	FR4
Enclosure	Anticorodal Aluminium
Cable Gland	Nickel-plated brass, nylon, silicon or EPDM for cable gasket and o-rings

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