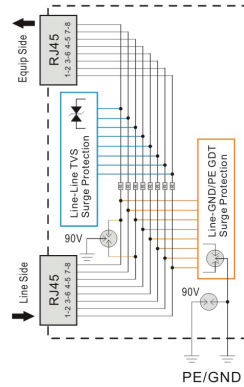


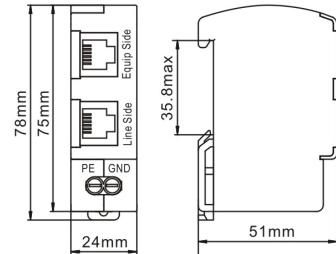
WTH-SG/RJ45  
Surge Protective Device for Ethernet & PoE



Connection Diagram



Dimensions

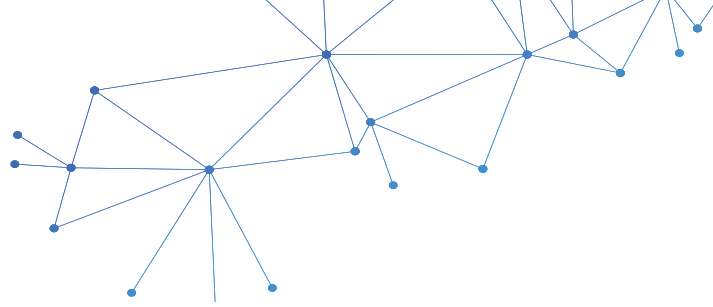


## DESCRIPTION

WTH -SG/RJ45 Series surge protective devices are applied to surge protection for data communication systems and is connected in series in CAT6 network cables, compatible with 10/100/1000/10000 (10G) Base-T Ethernet systems, protecting the equipment which are connected to the network (e.g. computers, routers, PoE devices, etc.) against damages by overvoltage surge. (Standards compliance: IEC61643 -21, UL497B, IEEE 802.3af PoE/802.3 at PoE Plus)

## SPECIFICATION

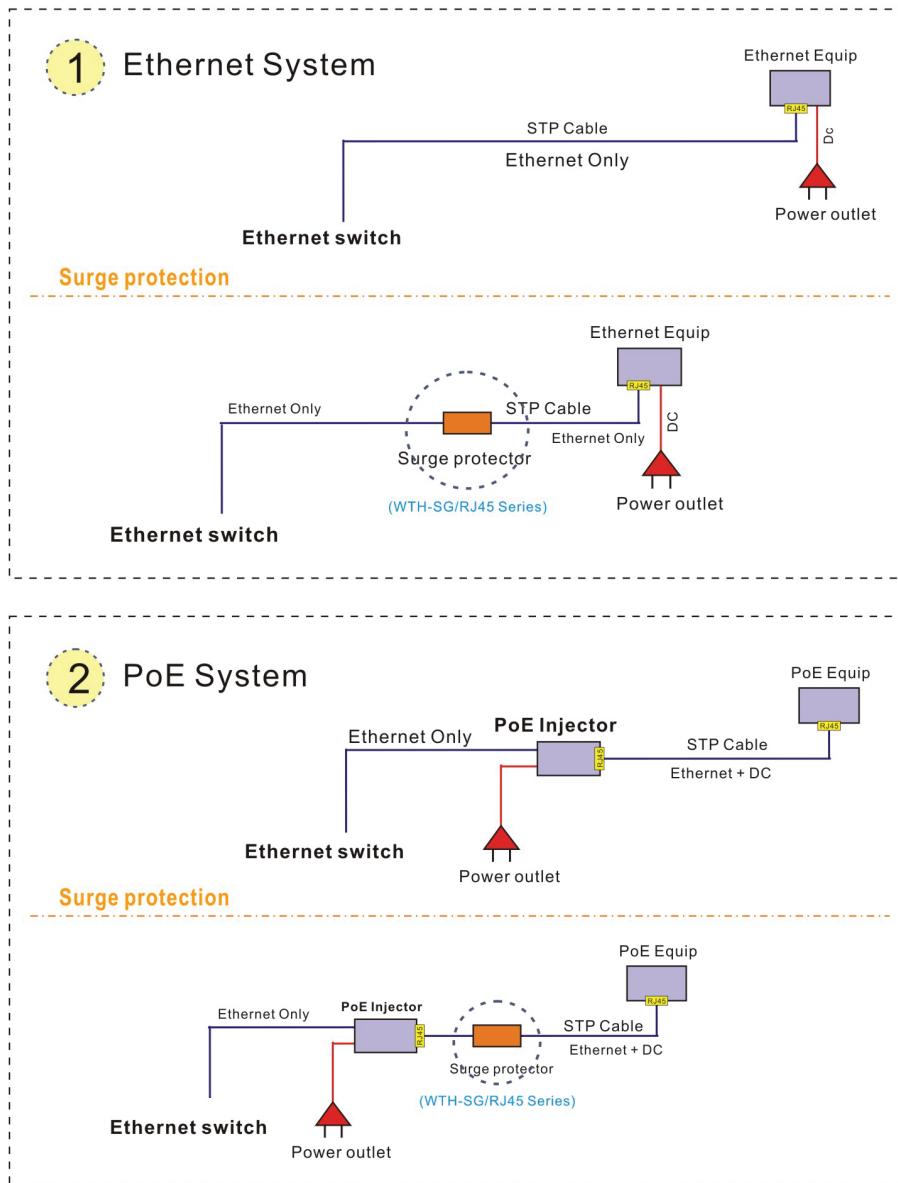
Model	WTH-SG/RJ45
Ordering code	US121012
Nominal operating voltage (Un)	2.8V(Ethernet)/48V(PoE)
Max. continuous operating voltage (UC)	3V(Ethernet)/60V(PoE)
Nominal Discharge Current (In @8/20μs)	3kA (line to line)
Max. Discharge Current (Imax @8/20μs)	20kA (line to GND/PE)
Voltage protection level (Up @line-line)	50V @ 3kV (1.2/50)
Voltage protection level (Up @line-GND/PE)	700/800V @ 3kV (1.2/50)
Max Line Current	600mA (PoE)
Data Rate	100/1000Mbps
Bandwidth (3db) per pair	>250MHz
Insertion Loss	<0.5dB @100MHz
Pairs Protected	1-2,3-6,4-5,7-8
Protective Element	GDT, TVS
Voltage Breakdown Range, Vdc @ 100 V/s	2.4-188 (L-L) / 72-108(L-G)
Impulse Voltage Range, Vdc @ 100 V/μs	<1000
Response Time (tA)	<100ns (line-GND/PE), <1ns (line-line)
Connection mode	RJ45
Temperature Range	- 40° to 176°F (-40° to 80°C)
Relative Humidity	0% to 95% noncondensing
Maximum Operating Altitude	10,000 feet (3000m)
Cross-sectional area of earth lead	3mm <sup>2</sup> multistranded / flexible
Stripping Length Contacts	0.25inches (6-7mm)

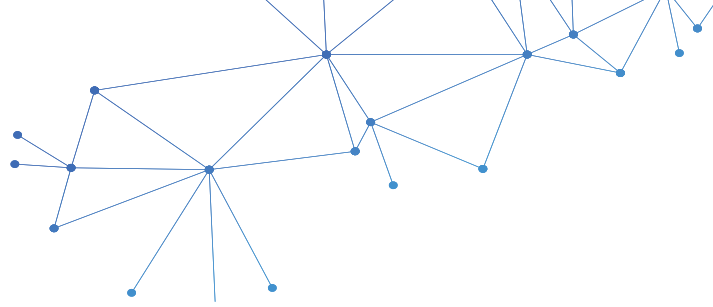


Terminal Screw Torque	Max. 0.25Nm
Protection Rating (IP Code)	IP 20
Surge Life at 0.5kA (8/20μs)	>2000 events
DIN Rail EN60715	35mm top-hat rail
Housing Material	Thermoplastic, UL94 V-0
Net Weight Per Unit	0.16Lb (71g)
Package Dimension (W×D×H)	0.9"×2.0"×3.1" (24mm×51mm×78mm)

### INSTALLATION INSTRUCTION

The surge protective devices shall be employed in a Listed enclosure or closet that is only accessible to technicians or service personnels.





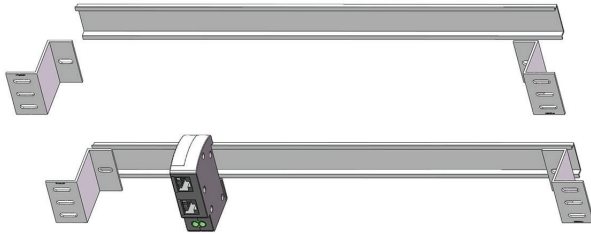
## DATA SHEET

Terminal Screw Torque	Max. 0.25Nm
Protection Rating (IP Code)	IP 20
Surge Life at 0.5kA (8/20µs)	>2000 events
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## INSTALLATION INSTRUCTION

The surge protective devices shall be employed in a Listed enclosure or closet that is only accessible to technicians or service personnels.

### DIN-RAIL MOUNTED



### SIMILAR PRODUCTS



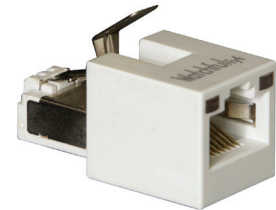
WTH-SG/RJ45  
DIN-Rail Mounted



WTH-SG/RJ45-KE  
Outdoor Wall Mounted



WTH-SG/RJ45-KG  
Outdoor Water-Proof



WTH-SG/RJ45-S  
Direct in Line Plug-in



WTH-SG/RJ45-KH-C/24  
24 Port, 19-inch Rack Mounted