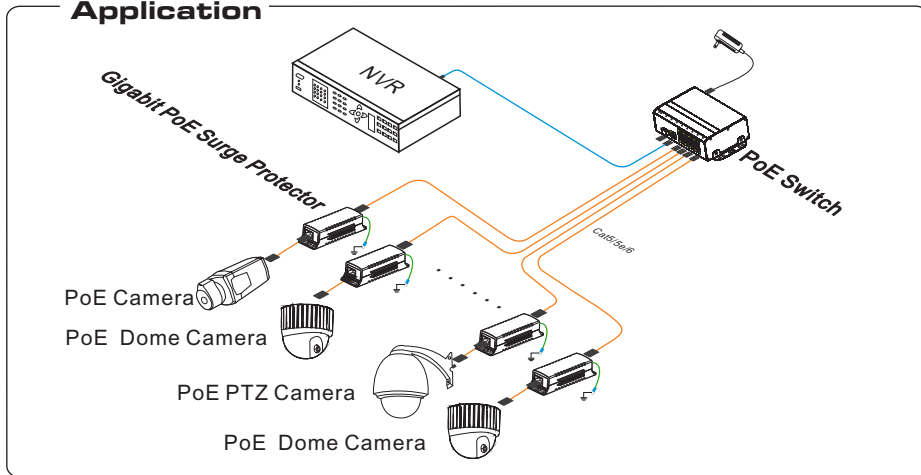


# Gigabit PoE Surge Protector User Manual

VerB 1.1

The surge protector accords with GB/T18802.21-2004/IEC61643-21 : 2000, and integrates with surge protection for both data cables and power source devices together. The built-in protection projects exempt the system from the damage caused by reacting over-voltage, operating over-voltage and static electricity discharge etc.. It features multi-level protection, large maximum discharge current, low limiting voltage, quick reacting time, low inserting loss etc..

## Application



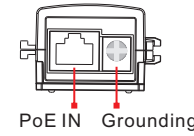
## Feature

- Reference Standard: GB/T18802.21-2004/IEC61643-21:2000;
- Protection Signal: PoE\PoE+\60W PoE;
- Signal Bandwidth: 10/100/1000Mbps;
- Features: Level 3 over-voltage protection, max. flow capacity 10KA, response time  $\leq 1\text{ns}$ , inserting loss  $\leq 0.9\text{dB}$ , 2 ounces copper-covered PCB design, max. load current 1.5A/line;
- V-0 fire-resistant material, improve product stability;
- Grounding mode: Grounding terminal to ground, with default grounding sheet metal, benefit to interlink combined application;
- Outlook Design: Clear mark, easily recognized, unique shell, wall-mounted, interlink & magnetic installations available.

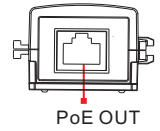
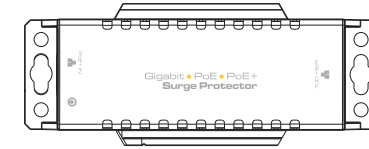
## Notice

- 1) Surge protector must be earthed reliably ;
- 2) Surge protector is installed in front of the protected device. Surge protector attempts to limit the voltage supplied to the protected device by shorting to ground any unwanted voltages above a safe threshold.

## Board Diagram



PoE IN Grounding  
( Figure 1 )



PoE OUT  
( Figure 1 )

## Installation Steps

Please check the following items before installation. If any item is found missing or damaged, please contact the dealer.

- Surge Protector 1 pc
- User Manual 1 pc

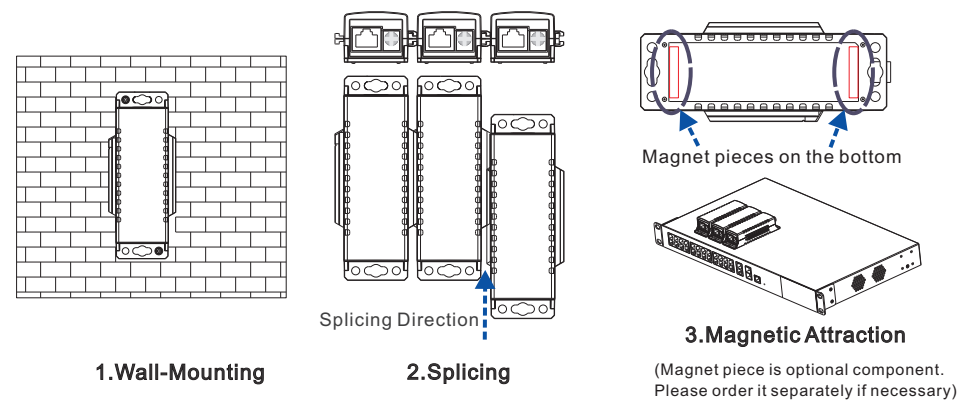
### Please follow the Installation steps below

- 1) Turn off the power of all the related devices before the installation, otherwise the device would be damaged;
- 2) Make sure the device is securely earthed;
- 3) Connect surge protector and PoE switch by an Ethernet cable;
- 4) Connect surge protector and PoE IP camera by another Ethernet cable;
- 5) Make sure all the connections are reliable and power on the system.

## Notice

- 1) Please confirm grounding resistance is in accordance with the standard;
- 2) Please confirm surge protector and the protected device are securely installed together;
- 3) Connect grounding cable on surge protector to grounding busbar in the shortest distance;
- 4) Pay attention to the IN & OUT symbols on surge protector; OUT port is for protected device. Devices would be damaged resulting from improper installation;
- 5) Reconnect or change the surge protector if the loss consumption increases caused by the poor connection of socket;
- 6) Any unauthorized modification to the supporting setting files would damage surge protector and influence the normal operation.

## Installation



1. Wall-Mounting

2. Splicing

3. Magnetic Attraction

(Magnet piece is optional component. Please order it separately if necessary)

Parameter

	Item	Description
PoE	Default Voltage(Un)	54V
	Max Continuous Operation Voltage(Uc)	60V
	Load Current(In)	≤1.5A
	Nominal Discharge Current In (8/20) us(Line-Line)	300A
	Nominal Discharge Current In (8/20) us(Line-Ground)	5KA
	Max. Discharge Current(8/20)us	10KA
	Limited Voltage (Up)10/700us(Line-Line)	< 85V(PoE)
	Limited Voltage(Up)10/700us(Line-Ground)	< 700V
	Momentary Withstand Voltage(10/700) us(Line-Ground)	10KV
	Residual voltage under In(Line-Line)	< 15V
	Response Time tA (Line-Line)	≤1ns
	Response Time tA (Line-Grounding)	≤100ns
	Protection Line Pair	1/2,3/6,4/5,7/8
	Insulation Resistance(MΩ)	≥0.4
	Transfer Bandwidth	10/100/1000Mbps
	Insertion Loss(dB)	≤0.9
Near-end Crosstalk(dB)	≥60	
Operation Environment	Operation Temperature	-40°C~75°C
	Storage Temperature	-40°C~85°C
	Humidity(non-condensing)	0~95%
Mechanics	Dimensions (L×W×H)	113mm×45.5mm×29mm
	Material	fire-resistant ABS
	Color	Black
	Weight	180g

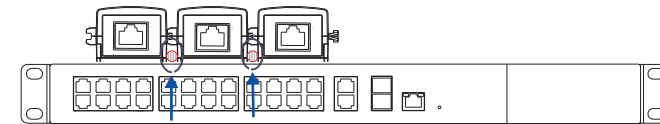
Product specifications subject to change without prior notice.

Trouble Shooting

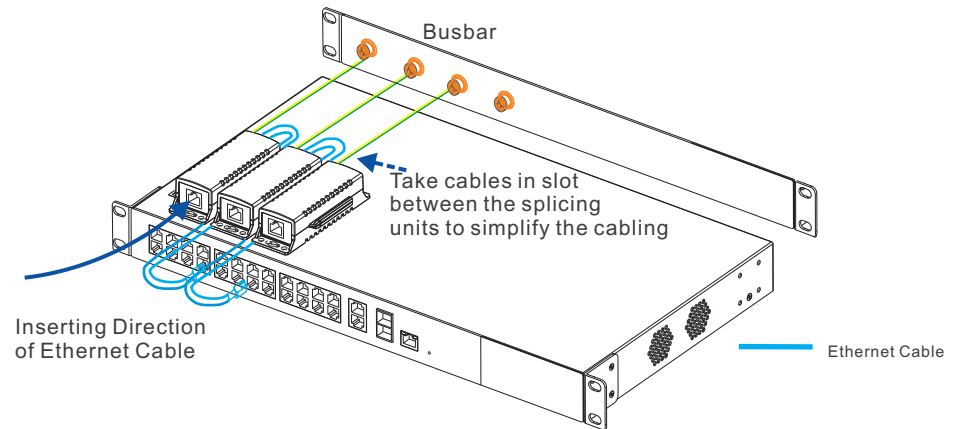
If any trouble in installation, please follow these steps:

- Please confirm if the installation is correct;
- Please confirm if the RJ45 cable order is in accordance with the EIA/TIA568A or 568B industry standards;
- The maximum consumption of each PoE port that supply for the PoE equipment can't exceed 60W, please do not use the PoE device whose consumption is over 60W;
- Please replace a failure device with a normal one to check if the device is broken;
- If the problem still exist, please contact the factory.

Cabling Collecting



Take cables in slot between the splicing units to simplify the cabling



Inserting Direction of Ethernet Cable

Ethernet Cable