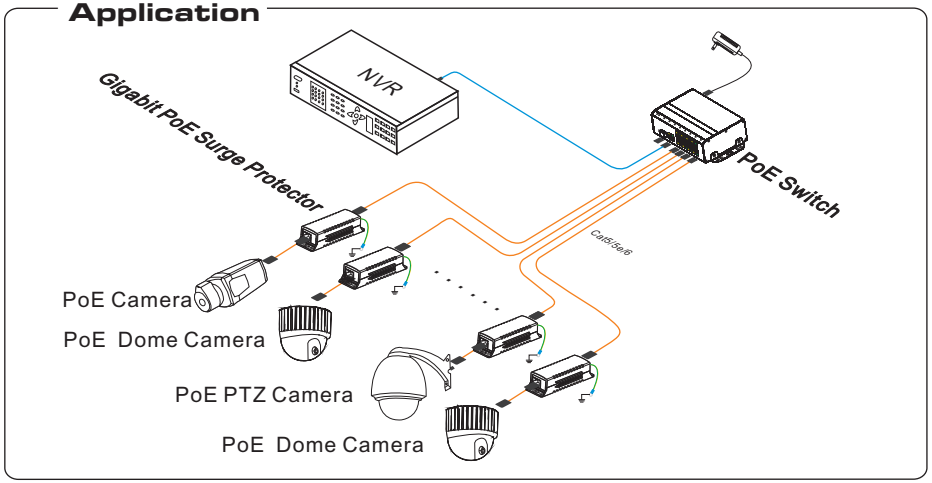
Gigabit PoE Surge Protector User Manual

CYGNUS electronics

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

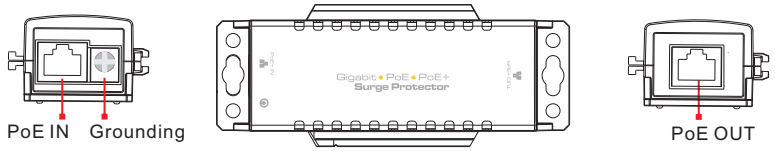
- Reference Standard: GB/T18802.21-2004/IEC61643-21:2000;
- Protection Signal: PoE\PoE+\60W PoE;
- Signal Bandwidth: 10/100/1000Mbps;
- Features: Level 3 over-voltage protection, max. flow capacity 10KA, response time ≤1ns, inserting loss≤0.9dB, 2 ounces copper-covered PCB design, max. load current 1.5A/line;
- 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



(Figure 1) (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

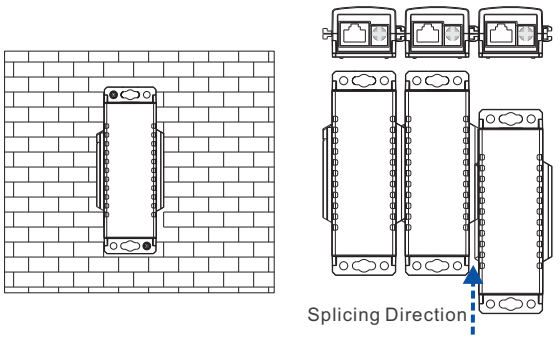
Please follow the Installation steps below

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.

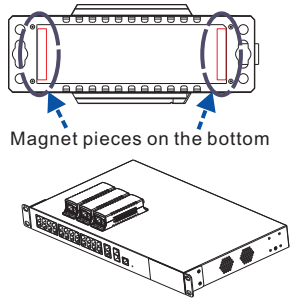
Notice

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℃~75℃
	Storage Temperature	-40℃~85℃
	Humidity(non-condensing)	0~95%
Mechanics	Dimensions (L×W×H)	113mm×45.5mm×29mm
	Material	fire-resistant ABS
	Color	Black
	Weight	180g

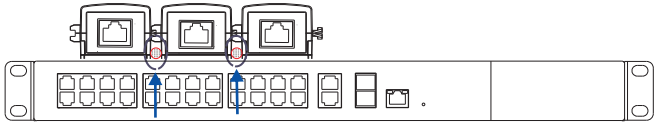
Product specifications subject to change without prior notice.

Trouble Shooting

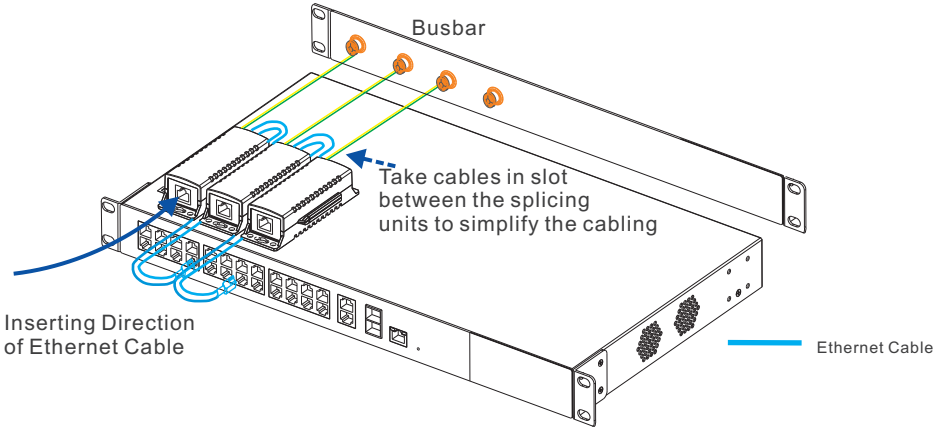
If any trouble in installation, please follow these steps:

- 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



CYGNUS electronics