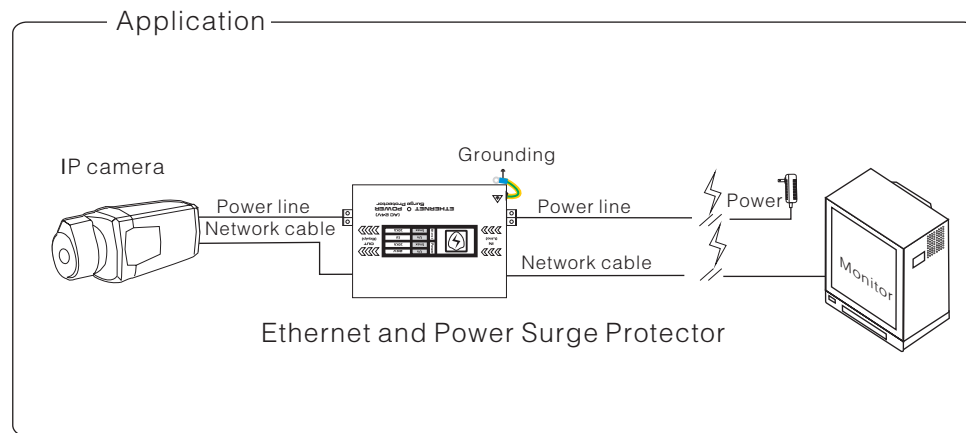


# Ethernet and Power Surge Protector

This protector is based on the IEC61643-21:2000 standard, integrated with surge protection for both network signal and power together. It is adapted to the lightning surge protection for surveillance IP camera, wireless camera's power line, network cable, exempt from the damage caused by reacting over-voltage, operating over-voltage and static electricity discharge etc.. At the same time the surge protector has different voltage levels of lightning protection of signal power supply. It features multi-level protection, large maximum discharge current, low limiting voltage, quick reacting time, low inserting loss, high transmission speed rate etc..



## Features

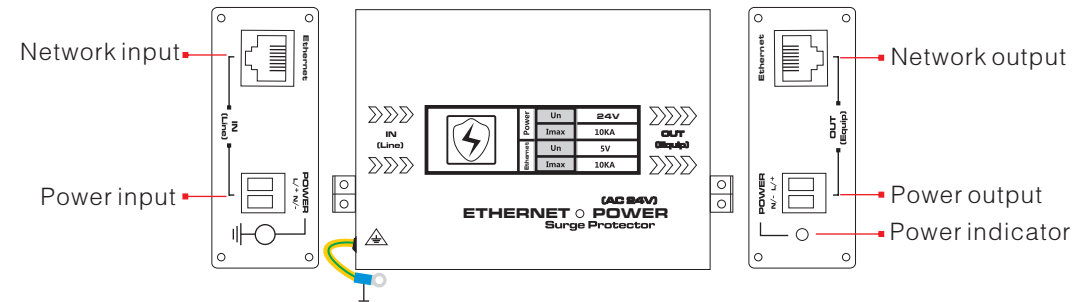
- Standard: IEC61643-21:2000;
- Protection signal: Ethernet signal and 24V~220V AC/DC power ;
- Function: Multi-level over voltage protection, large capacity discharge current, low limiting voltage, quick reacting time, low inserting loss;
- Grounding Mode: Extending Line to ground;
- Outlook design: Clear mark, easily recognized, aluminum shell, delicate size, simple installation.

## Notice

Surge protector's output should connect to the equipment are protected, make sure do not connect on the contrary!

## Board diagram

### Ethernet and Power Surge Protector



## Installation steps

Please check the following item before installation. If any missing, please contact the dealer.

- Network&surge protector 1pc
- User manual 1pc
- Hangers 1pair

## Please follow the following steps

- 1) Please turn off the power before installation, power on may damage the device and make sure the network connection is reliable;
- 2) Use a 2Pin power line to connect the power supply with surge protector's power input port, use another 2Pin power line to connect the IP camera with the surge protector's power output port;
- 3) Use a network cable with crystal connector to connect the surge protector's network input and monitor, and use another network cable to connect the surge protector and IP camera
- 4) Make sure the connection is reliable, power on the device.

## Notice:

- 1) Check grounding resistance that should meet the specification before connecting the device to system;
- 2) Connect the protector in front of the protected device reliably;
- 3) Connect the device ground wire to protection ground strap in the shortest distance;
- 4) Protectors have In, Out symbols, connect output to protected device, don't connect on the contrary, otherwise it will damage the protector and the device can't be protected;
- 5) If the consumption increases because of the socket bad connection, please reconnect or change the protector;
- 6) The user can not disassemble the protector to avoid damaging the protector and affect the normal working.

## Specification

Item		Description		
		Ethernet and Power Surge Protector	Ethernet and Power Surge Protector	
Network	Rated working voltage	5V		
	Maximum continuous working voltage	6V		
	Nominal discharge current ( 8/20us )	3KA		
	Maximum discharge current ( 8/20us )	10KA		
	Voltage limit between lines ( 10/700 us )	1-2	<36V	
		3-6	<36V	
	Insulation resistance	≥0.4MΩ		
	Insertion loss	≤0.9dB		
	Bandwidth	( 0.3-100 ) M		
	Transmission rate	100MHz		
Reacting time	≤1ns			
Power	Rated working voltage	24V	220V	
	Maximum continuous working voltage	36V	320V	
	Nominal discharge current ( 8/20us )	5KA	10KA	
	Maximum discharge current ( 8/20us )	10KA	20KA	
	Limiting voltage(8/20us)	≤40V	≤200V	
	Reacting time	≤25ns	≤25ns	
Environment	Working temperature	0°C ~ 55°C		
	Storage temperature	-20°C ~ 70°C		
	Humidity ( non-condense )	0~95%		
Mechanical	Net weight	157g		
	Dimension	108mm × 66mm × 28mm ( include interface length )		
	Material	Aluminum		
Stability	MTBF	>30000h		

Products are subject to change without prior notice!

## Trouble shooting

- 1) Surge protector doesn't need special maintenance, if it's damaged by high voltage, lightning strike(When LED indicator is off that means it loses lightning protection ability), please change the protector;
- 2) Use multimeter "Ω × 10" grade to measure protector's resistance between input and output core wires ,it should be less than 4.7Ω ; in case of open circuit, please change the protector;
- 3) Use multimeter "Ω × 1M" grade to measure core wire's resistance to the earth and it should be about 400kΩ .Otherwise please change the protector.