

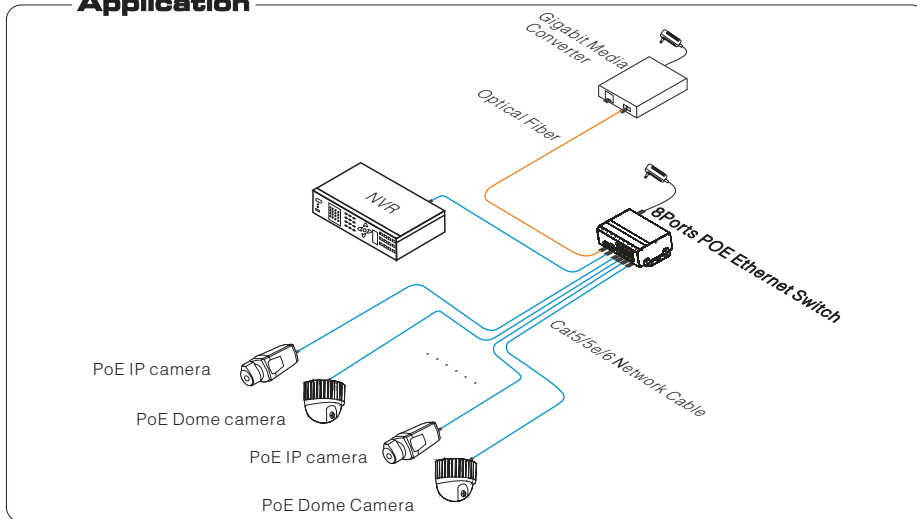
# 8 Ports PoE Ethernet Switch

## User Manual

VerB 1.0

8 ports PoE Ethernet Switch is an unmanaged Ethernet switch. This product provides 1 Gigabit uplink Ethernet port and 1 Gigabit uplink fiber port and 8\* 100Mbps PoE Ethernet ports, support IEEE802.3af/at power supply standard. The product is widely used in security surveillance and network project.

### Application



### Feature

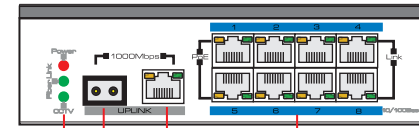
- Provide 1\*1000Mbps uplink fiber port and 1\*1000Mbps Ethernet port, 8\*10/100Mbps downlink Ethernet ports. 1~8 ports of PoE Ethernet switch support IEEE802.3af/at standard, which could provide Max. 30W supply power for infrared camera with large consumption;
- Reset button of 8 PoE ports which can easily solve problems of IP camera crash, without plugging network cable, is very convenient for system maintenance;
- Under one Key CCTV model, the 1~8 downlink ports can only communicate with uplink ports, the speed of downlink port is limited in 10Mbps and the transmission distance is up to 250m ;
- One Key CCTV mode is off by default, but can start while dialing the switch key on the front board to reset the product;
- Industrial product, fanless wavy metal shell design for good heat dissipation;
- Excellent isolated circuit protection, lightning protection up to 6KV;
- Fast installation, easily operation, convenient for wall, din rail and desktop installation.
- 1 M packet data cache to ensure large capacity data transfer smoothly;
- 8K MAC address, easy for network system expansion;
- Support IEEE802.3X full duplex data control; support port (Auto MDI/MDIX) function ;
- Redundant power design, support power hot backup;
- PoE watchdog (Detect POE device when it is frozen, reboot automatically).

### Caution

- 1) Transmission distance is related to the connecting cable. We suggest to use standard Cat5e/6 network cable to get the best transmission result.
- 2) If use optical uplink port, customer needs to purchase additional SFP module.
- 3) The equipment must be connected to anti-thunder grounding, otherwise the protection level will be greatly reduced; please use NO. 20th or above wire to connect grounding terminal to the earth.

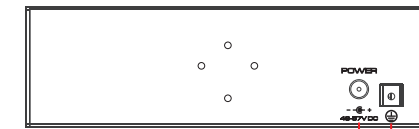
## Board Diagram

### Front Board



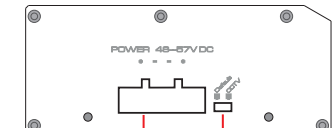
SFP optical port Uplink port  
Power/Uplink optical port/CCTV indicator LED

### Back Board



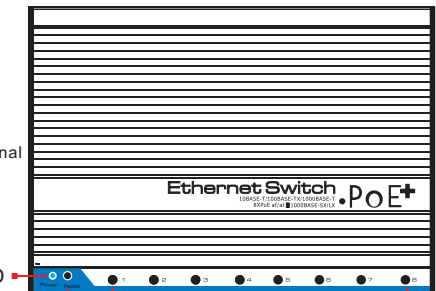
Power input  
Ground terminal

### Left Board



Power input CCTV Mode

### Up Board



Power indicator LED  
Reset Button PoE port reset button

### Description:

- 1) Front board with PoE Ethernet port, the yellow light on the RJ 45 socket indicate PoE status, the green light indicate network status; the yellow light and green light on the uplink network RJ 45 socket indicate network working status; the LED on the left side of SFP optical port indicate power, CCTV and working status of optical port;
- 2) The left board and back board have a DC48V~57V power input port respectively; equipped with a 120W power adapter by default, the average PoE output of each port is 15W, output of single port is max. 30W.

### Installation steps

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

- |                       |       |
|-----------------------|-------|
| ● POE Ethernet switch | 1 pc  |
| ● Power adapter       | 1 pc  |
| ● MIT hangers         | 2 pcs |
| ● Din rail hanger     | 1 pc  |
| ● User manual         | 1 pc  |

### Please follow the following installation steps

- 1) Please turn off the signal source and the device's power, installation with power on may damage the device;
- 2) Use 8pcs network cables to connect 8pcs IP cameras with the product's 1~8 RJ45 Ethernet ports;
- 3) Use another network cable or (optical fiber) to connect switch's UPLINK port with NVR or computer;
- 4) Connect switch with power adapter;
- 5) Check if the installation is correct and device is good, make sure all the connection is reliable and power up the system;
- 6) Make sure every network device has power supply and work normally.

## Specification

Item		8 ports PoE Ethernet Switch
Power	Power Supply	Power adapter
	Voltage range	DC48V~57V
	Consumption	< 5W
Ethernet Port Parameter	Ethernet Port	1~8 ports: default mode: 10/100BASE-TX; CCTV mode: 10BASE-T; UPLINK Ethernet port: 10/100/1000BASE-T; SFP: 1000BASE-X
	Transmission Distance	Downlink port: default mode: 0~150m; CCTV mode: 0~250m Uplink port: 0~150m SFP: depends on SFP module performance
	Transmission Medium	Cat5e/6 network cable
	PoE Protocol	IEEE802.3af/at protocol
	PoE Power Supply	End-span
	PoE Energy	Single port ≤ 30W, Whole < 120W
Ethernet Exchange Specification	Ethernet Standard	IEEE802.3 10BASE-T; IEEE802.3u 100BASE-TX; IEEE802.3ab 1000BASE-TX; IEEE802.3z 1000-SX/LX; IEEE802.3X
	Switch Capacity	5.6Gbps
	Packet Forwarding Rate	4.12Mpps
	Packet Buffer	1M
	MAC Address	8K
Indicator Status	Power Indicator Light	Front board: 1 pc red Light Side board: 1 pc red Light
	CCTV Indicator Light	1 pc (green), the green light on Indicates CCTV Mode start
	Optical Port LED indicator	1pc SFP port working indicator light: green
	Uplink Ethernet Port Indicator	1 pc network working status: green light on RJ 45 port
	Downlink Ethernet Port Indicator	1~8 ports : green light indicates network status, yellow light indicates PoE status
Reset	PoE Reset Button	Total 8 pcs, corresponding to 1~8 ports, PoE Function reset
	Reset	1 pc, machine reset
Protection	Port Lighting Protection	6KV, Per: IEC61000-4-5
	ESD	6KV/8KV, Per: IEC61000-4-2
Operation Environment	Working Temperature	-40°C~75°C
	Storage Temperature	-40°C~85°C
	Humidity (Non-condensing)	0~95%
Mechanical	Dimension(L×W×H)	159mm×110mm×46.5mm
	Material	Aluminum
	Color	Black
	Weight	575g

Products are subject to change without prior notice

## Trouble Shooting

Please find the following solution when the device doesn't work

- 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 can supply to the PoE device can't over 30 W, please do not use the PoE device with consumption over 30W;
- Please replace a failure device with a properly functioning one to check if the device is broken;
- If the problem still exists, please contact the factory.

## RJ 45 Making Method

Tools to make RJ45: wire crimper, network tester.

Wire sequence of RJ45 plug should conform with EIA/TIA568A or EIA/TIA568B standard.

- 1) Strip off the 2cm insulating layer to expose the 4 pairs UTP cable;
- 2) Separate the 4 pairs of UTP cable and straighten them;
- 3) Line up the 8 separated pieces of cables per EIA/TIA 568A or 568B;
- 4) Cut the cables to leave 1.5cm bare wire and make sure 8 thread ends are flat and neat ;
- 5) Insert 8 cables into RJ45 plugs, make sure each cable is inserted in each pin;
- 6) Then use wire crimper to crimp the RJ45;
- 7) Do the above 5 steps again to make the another end of the twisted pair and make sure consistent cable order between two ends ;
- 8) Using network tester to test the cable.

Pin color	
1	white/green
2	green
3	white/orange
4	blue
5	white/blue
6	orange
7	white/brown
8	brown



EIA/TIA 568A

Pin color	
1	white/orange
2	orange
3	white/green
4	blue
5	white/blue
6	green
7	white/brown
8	brown



EIA/TIA 568B

### ! Notice

- Make sure both ends use EIA/TIA568A connection method when using RJ45 port.
- Make sure both ends use EIA/TIA568B connection method when using RJ45 port.