# 16 Ports PoE Ethernet Switch
User Manual　　　　VerB 1.0

16 ports PoE Ethernet Switch is a security surveillance Ethernet Switch which aims at Ethernet high definition surveillance and security system. The product fully combines the characteristics of security surveillance, provides fast packet forwarding ability and abundant backplane bandwidth, which ensures clear image and fluent transmission. ESD and surge protection circuit can improve product stability. The product supports one key Extend mode, with VLAN function can restrain the network storm, protect the information security, prevent the viral transmission and cyber attack, fully satisfy the Ethernet video security surveillance system and Ethernet project needs.

Application
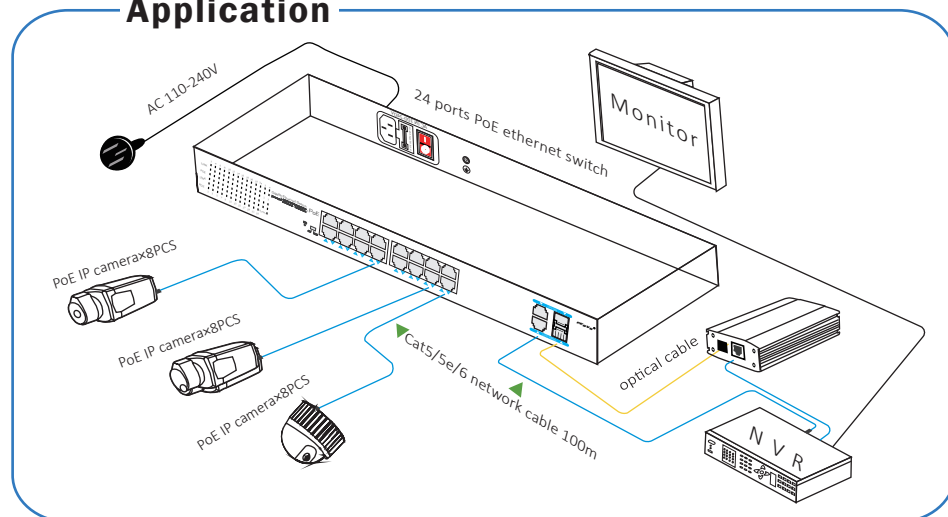
◆ Feature

- Major ports: 16x 10/100/1000Mbps PoE ports, 2x 10/100/1000Mbps uplink port, 2x 10/100/1000Mbps SFP port, every port supports MDI/MDIX;
- Special function: downlink ports can only communicate with uplink ports;
- Standard: IEEE802.3af,POE pin:1/2+,3/6- (End-span),the remaining lines (4,5,7,8) can be used for other program;
- Protection: Excellent anti thunder, anti static and anti-interference ability;
- Smart Design,With anti-theft lock,Easy installation;
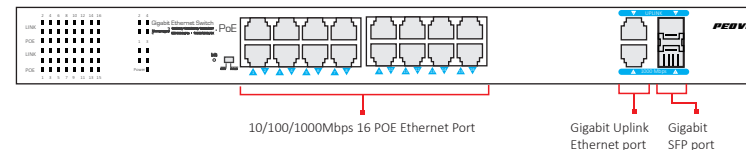- Operation: Plug and Play, No Setting required;

⚠ Notice

The transmission distance is related to the connected cable.We suggest standard Cat5e/6 network cable to make sure transmission distance can up to furthest!

◆ Board Diagram

▶ Front board

10/100/1000Mbps 16 POE Ethernet Port　　Gigabit Uplink Ethernet port　Gigabit SFP port

▶ Back board

AC IN 110-240V

▶ Side board

⚠ Notice

1) Device must be connected with lightning protection grounding, otherwise protection level will reduce; please use above No.20 wire to connect the grounding terminal.
2) Turn the dial switch for left, the equipment can enter surveillance module after providing equipment power.

◆ Installation steps

Please check the following items before installation, if it is missing, please contact the dealer .
- 16 ports PoE Ethernet Switch　　　　　　　　　　　　　1pcs
- AC power cable　　　　　　　　　　　　　　　　　　　1pcs
- Accessory　　　　　　　　　　　　　　　　　　　　　1pcs
- User manual　　　　　　　　　　　　　　　　　　　　1pcs

Please follow the below installation steps
1) Please turn off the signal source and the device's power before installing, installation with power on may damage the device;
2) Use network cable connect PoE IP camera and 1～16 downlink ports of product respectively;
3) Use a network cable connect equipment uplink port and NVR or computer;
4) Connect power adapter;
5) Check if the installation is correct, equipment is in good condition, the connection is stable, then power on for system;
6) Ensure the Ethernet equipment with power on can work properly.

◆ Specification

Item		Description
Power	Power Adapter Voltage	AC 110V-240V
	Consumption	250W
Network Connector	Network Port — POE Ethernet Port	1～16 Port : 10/100/1000Mbps
	Network Port — Ethernet port	Uplink Port: two Ethernet 1000Mbps
	Network Port — SFP Port	SFP Port : two SFP 1000Mbps
	Transmission Distance	1～16 Port : 0～100m;
		1-2 Uplink port:0~100m
		SFP: depends on the optical module
	Transmission Medium	Cat5/5e/6 standard network cable
Network Switch	Network Standard	IEEE802.3/802.3u, IEEE802.3x,IEEE802.1D
	Switching Capacity	40Gbps
	Packet Forwarding	29.75Mpps
	MAC Table	8K
Power Over Ethernet	PoE Standard	IEEE 802.3af
	PoE Power Supply	End-Span(1/2+;3/6-)
	PoE Power	af=15.4W(every port)
LED Status Indicator	PoE Ethernet LED Indicator	Power: 1 red light indicates that the power normal work;
		POE: 16 yellow lights indicate that the POE is power on;
		Ethernet: 20 green lights indicate that the Ethernet link and act;
Environmental	Working temperature	0℃~55℃
	Relative Humidity	20~95%
	Storage temperature	-20℃~70℃
Mechanical	Dimension (L×W×H)	440mm*290mm*45mm
	Color	Black
	Weight	3385g
Stability	MTBF	>30000h

Specification change will not be noticed

◆ Trouble Shooting

Please follow the steps if the equipment has trouble.
- Make sure the equipment is installed according to the manufactures installation guide.
- Confirm RJ45 cable order meets EIA/TIA568A or 568B standard.
- Every PoE port can provide PoE equipment maximum power less than 30W, please do not connect the PoE equipment with power over 30W.
- Replace the equipment with a proper functioning 4 ports PoE Ethernet Switch to check if the equipment is damaged.
- Please contact your vendor if trouble still exists.

◆ Plug Producing Method

Instruments to be used: wire crimper, network tester. Wire sequence of RJ45 plug should conform with EIA/TIA568A or 568B.
1) Please remove 2cm long the insulating layer, and bare 4 pairs UTP cable;
2) Separate the 4 pairs UTP cable and straighten them;
3) Line up the 8 pieces of cables per EIA/TIA 568A or 568B;
4) Cut off the cables to leave 1.5cm bare wire;
5) Plug 8 cables into RJ45 plug, make sure each cable is in each pin;
6) Use the wire crimper to crimp it;
7) Repeat above 5 steps to make the another end;
8) Use network tester to test the cable if it works.

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

When choose RJ45 make sure if one end is EIA/TIA568A,the other end should also be EIA/TIA568A.
When choose RJ45 make sure if one end is EIA/TIA568B,the other end should also be EIA/TIA568B.