

# Quick Start Guide



## 16-Port Fast Ethernet Unmanaged PoE+ Switch

## 1 Features

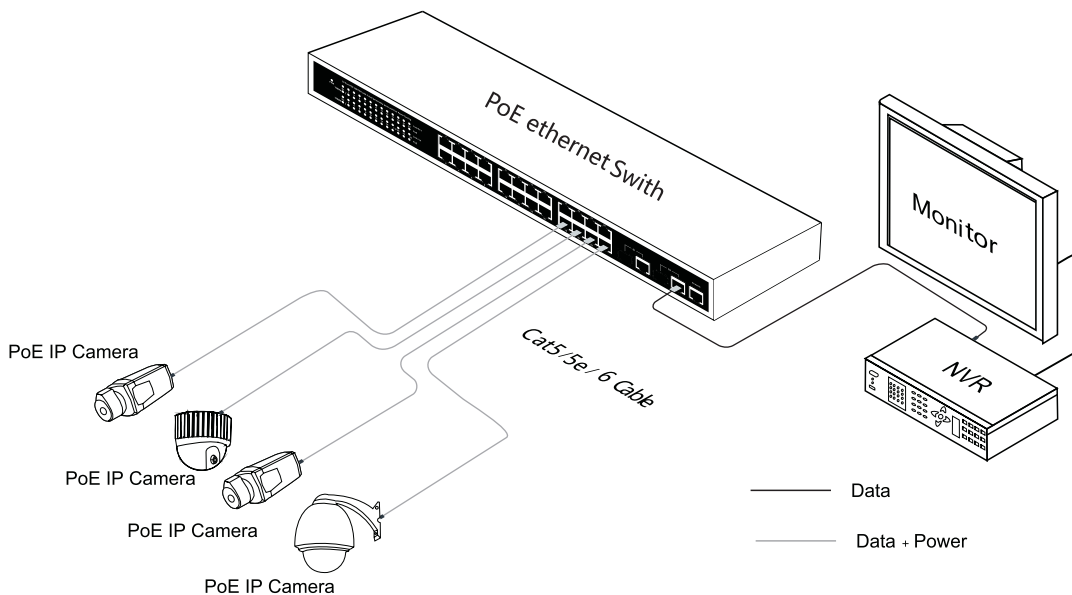
- The switch supports one-key function conversion, currently supports five modes, DEFAULT mode, VLAN mode, EXTEND mode, WATCHDOG mode, QOS mode.
  - DEFAULT:** Normal mode, no special function (Normal mode all switch down).
  - VLAN:** Ports 1-16 do not communicate with each other; they communicate only with uplink ports. This controls broadcast storm and strengthens security.
  - Extend:** Ports 1-16 communicate with each other and with uplink ports. Ports 1-16 can transmit up to 250m Cat5e/6rated cable or higher.
  - PoE Watchdog:** If a linked network port receives no data for 2-3 minutes, PoE Watchdog cuts and restores power to that port, causing the linked device, such as an IP camera, to restart.
  - QOS:** QOS is the specified port with port data priority, priority is higher than other ports, other ports data priority is equal. 1-2 ports specify the priority, then the data forwarding of these two ports has a higher priority than the other ports, so the data of these two ports are preferentially forwarded.
- Conforms to IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3af, IEEE 802.3at.
- Provides 16 10/100Base-TX ports and 2 Gigabit Combo ports.
- Provides 16 PoE+ injector and 250W Built-in power supply.
- High back-plane bandwidth 7.2 Gbps.
- IEEE 802.3x Flow control
- 6KV Surge protection



**Notice:** The transmission distance is related to the connected cable. Standard Cat5e/6 network cable and the quality of camera will help maximize the furthest distance possible.

## 2 Product Introduction

The 16-Port PoE Ethernet Switch is designed specifically for Ethernet HD monitoring in security systems and projects. The product integrates seamlessly with the requirements of security monitoring, offering rapid packet forwarding capabilities. It supports full gigabit transfer rates, providing ample bandwidth to ensure clear image quality and smooth transmission. This switch meets the high bandwidth demands necessary for high-definition video.



## 3 Specifications

	Item	Description
Power	Power supply	Built-in Power Supply
	Voltage Range	AC100~240V
	Consumption	250W for 16 PoE
Ethernet	Speed	1~16 Port: 10/100Mbps 17~18: Gigabit Combo
	Transmission Distance	100Meter(328ft)for RJ-45 2Km 20Km for SFP Port The optical module is optional
	Ethernet Standard	IEEE802.3/802.3u/802.3ab/802.3z/802.3af/802.3at
Network Switch	Switching capacity	7.2G
	Transfer Rate	14,880pps for 10Mbps
		148,800pps for 100Mbps
		1,488,000pps for 1000Mbps
	MAC Address	8K MAC address table
LINK / ACT	On Green	The port is connecting
	Blinks -	The port is receiving or transmitting data
	Off -	The port is not linked successfully with the device
POE	On Green	PD is connected
	Off -	No PD is connected or power forwarding fails
	PoE pin assignment	V+(RJ45 Pin 1,2), V-(RJ45 Pin 3,6)
Environment	Working Temperature	0~40 °C
	Storage Temperature	-40~70 °C
	Humidity Non condensing	0~90%
Mechanical	Dimension	440 x 200 x 44mm
	Color	Black

Specification change will not be noticed

## 4 Installation Steps

Please check the following items before installation, if it is missing, please contact the dealer.

- 16-Port Fast Ethernet Unmanaged PoE+ Switch 1pcs
- AC power cable 1pcs
- Accessory 1pcs
- User manual 1pcs

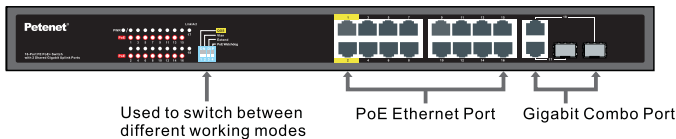
### Please follow the below installation steps

- 1) Please turn off the signal power and display device power before installation, installation with power will damage the transmission equipment;
- 2) Use a network cable to connect the PoE IP camera or other devices to 1-16 POE port of the PoE Switch;
- 3) Use a network cable to connect equipment to the uplink port and NVR or computer;
- 4) Connect AC power;
- 5) Check if the installation is correct, the equipment is in good condition and the connection is stable; then connect power to the system;
- 6) Ensure the PoE Switch has power and works properly.

## 5 Board Diagram

16-Port Fast Ethernet Unmanaged PoE+ Switch

### Front board



### Back board



## 6 Troubleshooting

Please follow the steps if the equipment has trouble

- Make sure the equipment is installed according to the manufacturer's installation guide.
- Confirm RJ45 cable order meets EIA/TIA 568A 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 16 ports PoE Ethernet Switch to check if the equipment is damaged.
- Please contact your vendor if trouble still exists.

## 7 Plug Producing Method

Instruments to be used: wire crimper, network tester and wire sequence of RJ45 plug should conform with EIA/TIA568A or 568B

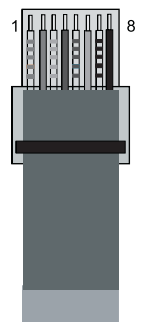
- 1) Please remove 2cm long of the insulating layer and bare 8 pairs UTP cable
- 2) Separate the 8 pairs UTP cable and straighten them.
- 3) Line up the 8 pieces of cables per EIA TIA 568A or 568B.
- 4) Cut off the cables to leave 1.5cm bare wire.
- 5) Plug 8 cables into RJ45 plug make sure each cable is in each pin.
- 6) Use the wire crimper to crimp it.
- 7) Repeat above 6 steps to make the another ends.
- 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 choosing RJ45 make sure if one end is EIA / TIA568A. the other end should also be EIA / TIA568A. When choosing RJ45 make sure if one end is EIA / TA568B. the other end should also be EIA / TIA568B.