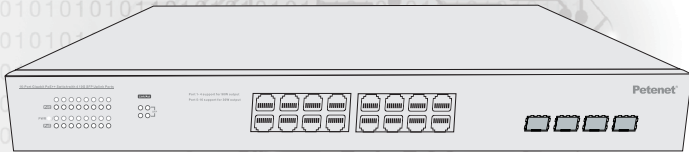


Quick Start Guide



16-Port Gigabit Unmanaged PoE++ Switch

1 Features

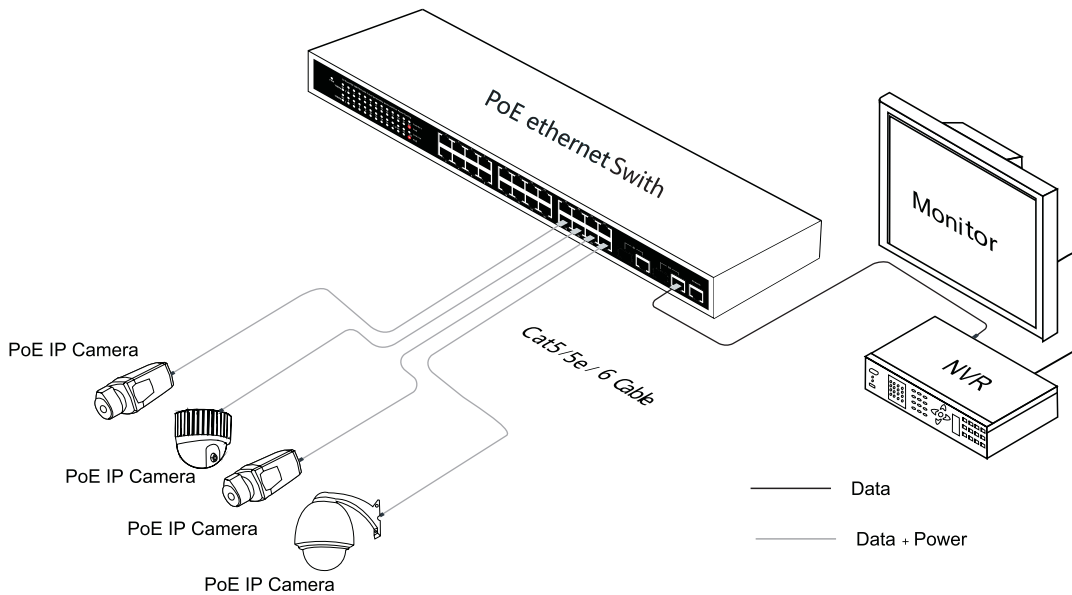
- Conforms to IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3ae, IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt.
- Provides 16 10/100/1000Base-T ports and 4 10G SFP+ ports.
- 16 POE Ports, 1-4 ports support IEEE802.3af/at/bt of 90 watts per port, 5-16 ports support IEEE802.3af/at of 30 watts per port, with capability 370 watts total budget.
- High back-plane bandwidth 112 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 Ethernet Switch is designed for security monitoring and Ethernet projects, featuring 16 x 1G PoE ports and 4 x 10G SFP+ ports. It is fully integrated with security monitoring characteristics, providing fast packet forwarding capabilities and gigabit transfer.



3 Specifications

Item	Description	
Power	Power supply	Built-in Power Supply
	Voltage Range	AC100~240V
	Consumption	370W for 16 PoE
POE Output for Each Port	Port 1- 4 support for IEEE802.3af/at/bt and power up to 90W Port 5-16 support for IEEE802.3af/at and power up to 30W	
	Speed	1~16 Port: 10/100/1000Mbps 17~20: 10G SFP+ Port
Ethernet	Transmission Distance	100Meter(328ft)for RJ-45 2Km 20Km for SFP Port The optical module is optional
	Ethernet Standard	IEEE 802.3/802.3u/802.3ab/802.3z/802.3ae/802.3af/at/bt
Network Switch	Switching Capacity	112G
	Transfer Rate	14,880pps for 10Mbps
		148,800pps for 100Mbps
		1,488,000pps for 1000Mbps
		14,880,000pps for 10000Mbps
MAC Address	16K 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
	On Green	PD is connected
POE	PoE pin assignment	IEEE 802.3af/at/:2 pairs V+(RJ45 Pin 1,2),V-(RJ45 Pin 3,6) IEEE 802.3bt/:4 pairs V+(RJ45 Pin 1,2),V-(RJ45 Pin 3, 6) V+(RJ45 Pin 4,5),V-(RJ45 Pin 7,8)
		Working Temperature
Enviro-nment	Storage Temperature	-40~70 °C
	Humidity Non condensing	0~90%
	Mechanical	Dimension
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 Gigabit Unmanaged PoE++ Switch 1pcs
- AC power cable 1pcs
- Accessory 1pcs
- User manual 1pcs

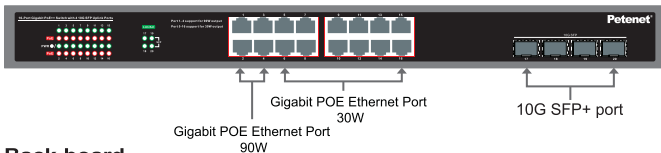
Please follow the below installation steps

- 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 Gigabit Unmanaged PoE++ Switch

Front board



Back board



Power input port
INPUT: 100-240VAC

6 Troubleshooting

Please follow the steps if the equipment has trouble

- Make sure the equipment is installed according to the manufacture's installation guide.
- Confirm RJ45 cable order meets EIA/TIA 568A or 568B standard.
- 1-4 port can provide PoE equipment maximum power maximum power less than 90W , other PoE port can provide PoE equipment maximum power less than 30W, please do not connect the PoE equipment over maximum power.
- 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

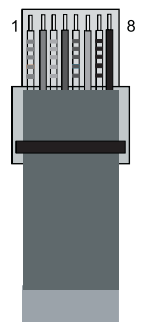
- 1) Please remove 2cm long of the insulating layer and bare 8 pairs UTP cable
- 2) Separate the 8 pairs UTP cable and straighten them.
- 3) Line up the 8 pieces of cables per EIA TIA 568A or 568B.
- 4) Cut off the cables to leave 1.5cm bare wire.
- 5) Plug 8 cables into RJ45 plug make sure each cable 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.