

Quick Start Guide



**16-Port Gigabit PoE+ Switch
2 Gigabit RJ45 & 2 SFP Uplink Ports**

1 Features

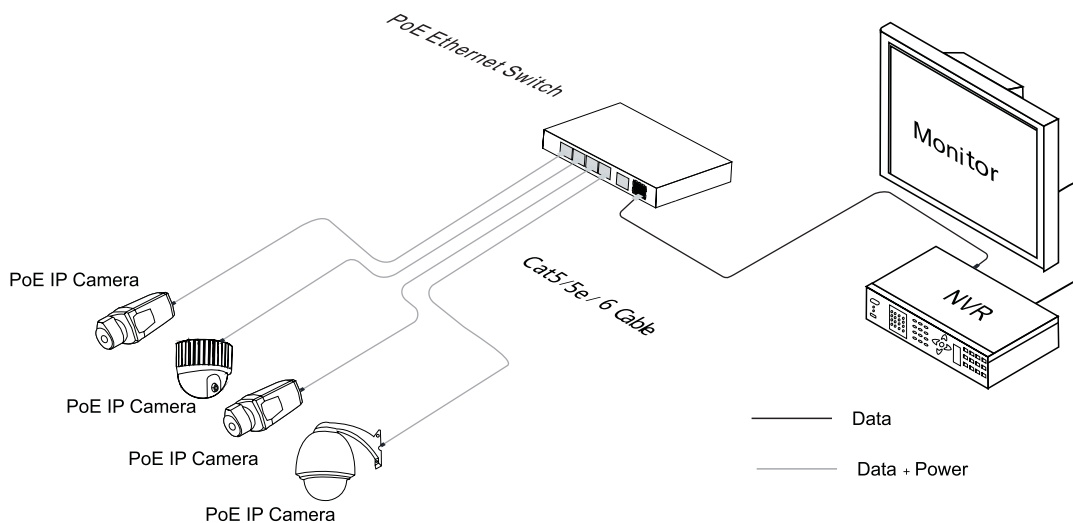
- The switch supports one-key function conversion, currently supports five modes, DEFAULT mode, VLAN mode, EXTEND mode, WATCHDOG mode, QOS mode.
DEFAULT: Normal mode, no special function (Normal mode all switch down).
VLAN: Ports 1-16 do not communicate with each other; they communicate only with uplink 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/6 rated 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 IEEE802.3, IEEE 802.3i, IEEE802.3u, IEEE802.3ab, IEEE802.3z, IEEE802.3af/at
- Provides 18 10/100/1000Base-T ports and 2 Gigabit SFP
- Provides 16 PoE+ injectors ports and 250W Built-in power supply
- High backplane bandwidth 40 Gbps
- IEEE802.3x 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 Gigabit PoE+ Switch is fully integrated to support security monitoring, providing high-performance packet forwarding and Gigabit Ethernet transfer rates. Adaptive ports automatically adjust bandwidth to ensure clear images and smooth transmission for any application, including high-definition video recording or streaming. The AI DIP switch enables PoE Watchdog, QoS, Extend, and VLAN modes to further enhance performance and security.



3 Specifications

Item		Description
Power	Power supply	Built-in power supply
	Voltage Range	100~240VAC
	PoE Budget	250W for PoE
Ethernet	Speed	Ports 1 to 18: 10/100/1000 Mbps Ports 19-20: Gigabit SFP
	Transmission Distance	RJ45: 328 ft. (100 Meters) SFP Port: Transmission distances vary with type of SFP module used.
	Ethernet Standard	IEEE 802.3 / 802.3i / 802.3u / 802.3ab / 802.3z / 802.3af / 802.3at
Network Switch	Switching capacity	40G
	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 connected
	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 -	PD is connected or power forwarding fails
	PoE pin assignment	V+ (RJ45 Pin 1, 2), V- (RJ45 Pin 3, 6)
	Working Temperature	0°C~40°C
	Storage Temperature	-40°C~70°C
Environment	Humidity Non condensing	0~90%
	Ports Surge	6KV
	Dimension	320 x 207 x 44mm
Mechanical	Color	Black

Specifications are subject to change without prior notice.

4 Installation Steps

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

- 16-Port Gigabit PoE+ Switch 1pcs
- Rack mount kit 1pcs
- AC power cable 1pcs
- User manual 1pcs

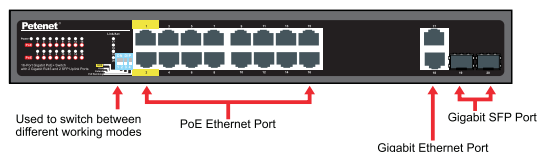
Please follow the below installation steps

- 1) Ensure that all devices are powered off before installation.
NOTE: Installing with the power on will damage the equipment.
- 2) Use network cable to connect PoE IP cameras or other devices to Ports 1-16 of the PoE Switch.
- 3) Use network 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 provide power for system;
- 6) Ensure the PoE Switch has power and works properly.

5 Board Diagram

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

Front board



Back board



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/TIA568A or 568B standard.
- Each PoE port can provide maximum power of 30W. Do not connect equipment requiring over 30W.
- Replace the equipment with a proper functioning 16 port PoE Ethernet Switch to check if the equipment is damaged.
- Please contact your vendor if trouble still exists.
- Total PoE power between all 16 PoE Ports is limited to 250W.

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) 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	8	Pin	Color	1	8
1	White / Green			1	White / Orange		
2	Green			2	Orange		
3	White / Orange			3	White / Green		
4	Blue			4	Blue		
5	White / Blue			5	White / Blue		
6	Orange			6	Green		
7	White / Brown			7	White / Brown		
8	Brown			8	Brown		

EIA / TIA568A

EIA / TIA568B



Choosing:

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 / TA568B. the other end should also be choosing EIA / TIA568B.