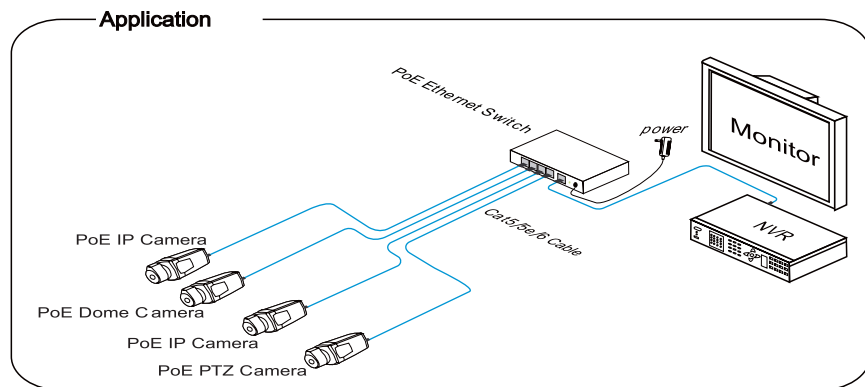# 4xGbE(PoE)+ 1xGbE RJ45 Switch
User Manual

The **5 Port/4 PoE GbE PoE Switch** is fully integrated to support security monitoring, providing fast packet forwarding capability and fast Ethernet transfer rates by utilizing the appropriate bandwidth to ensure clear images/smooth transmission and enough bandwidth for high-definition video.

Application

- PoE Ethernet Switch
- power
- Monitor
- PoE IP Camera
- Cat5.5e /6 Cable
- NVR
- PoE Dome Camera
- PoE IP Camera
- PoE PTZ Camera

■ Features

- The AI DIP switch includes four modes:

  VLAN: Ports 1-4 do not communicate with each other; they communicate only with uplink ports. This controls broadcast storm and strengthens security.

  Extend: Ports 1-4 communicate with each other and with uplink ports. Ports 1-4 can transmit up to 250m with 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 IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3af, IEEE 802.3at.
- Provides 4 10/100/1000Base-T ports + 1 Gigabit RJ45 ports.
- Provides 4 PoE+ ports (up to 30W) with 120W total PoE power budget.
- High back-plane bandwidth 10 Gbps.
- IEEE 802.3x flow control.
- Surge protection for power port and data ports.
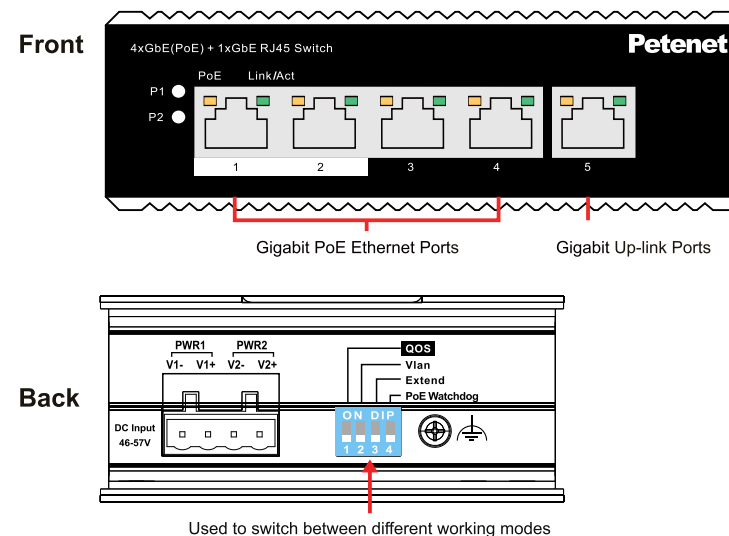- Supports dual DC power input.

⚠ **Notice**

The transmission distance is related to the connected cable. We suggest standard Cat5e / 6 network cable and quality of camera so the transmission distance can up to furthest

■ Board Diagram
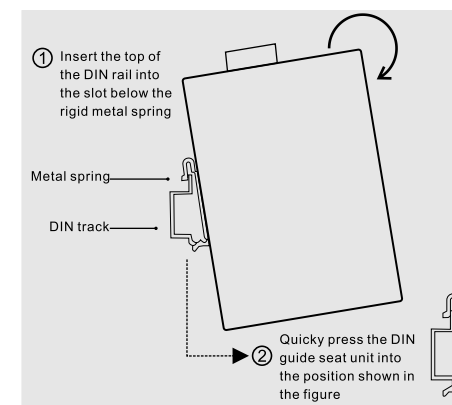
4xGbE(PoE)+ 1xGbE RJ45 Switch

Front

Gigabit PoE Ethernet Ports   Gigabit Up-link Ports

Back

Used to switch between different working modes

■ Installation Steps

Before installing, check the following items. If any items are missing, please contact the installation company.

- 4xGbE(PoE)+ 1xGbE RJ45 Switch   1 pcs
- Accessory   1 pcs
- User manual   1 pcs

■ DIN Guide rail installation

1) First, check whether DIN-Rail rail installation tool accessories are available to ensure that everything is normal;

2) Then adjust the correct installation direction of the product, that is to say, the power supply terminal up is correct orrientation;

3) Then put the upper half of the product guide card (with the spring) into the rail strip, and then the lower half of the little force into the rail bar;

① Insert the top of the DIN rail into the slot below the rigid metal spring

Metal spring

DIN track

② Quicky press the DIN guide seat unit into the position shown in the figure

■ Specifications

Item		Description
Power	Power Supply	External Power Supply
	Voltage Range	46-57V DC
	PoE Power Budget	120W for PoE
Ethernet	Speed	Ports 1 to 4: 10/100/1000Mbps PoE+ (Up to 30W) Port 5 : 10/100/1000Mbps Ethernet Port
	Transmission Distance	RJ45: 328 ft. (100 meters)
Network Switch	Ethernet Standard	IEEE 802.3 / 802.3u / 802.3ab / 802.3af / 802.3at
	Switching Capacity	10 Gbps
	Transfer Rate	14,880 pps for 10 Mbps 148,800 pps for 100 Mbps 1,488,000 pps for 1000 Mbps
	MAC Address	2K MAC address table
LINK/ACT Indicator	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 Indicator	On — Orange	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)
Working Environment	Working Temperature	-40°C~60°C
	Storage Temperature	-40°C~60°C
	Port surge	6KV
	Humidity Non-Condensing	0~90%
Mechanical	Dimension	120 x 90 x 37mm
	Color	Black

Specifications are subject to change without prior notice.

■ Troubleshooting

● 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 PoE Ethernet Switch to check
  if the equipment is damaged.
● Total PoE power between all 4 PoE ports is limited to 120W.

■ Plug Producing Method

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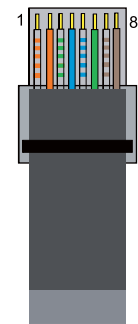1. Please remove 2cm of the insulating layer and bare 8 pairs UTP cable.
2. Separate the 8 pairs of UTP cable and straighten.
3. Line up the 8 pieces of cables per EIA TIA 568A or 568B.
4. Cut off the cables to leave 1.5cm bare wire.
5. Plug 8 cables into RJ45 plug make sure each cable is in each pin.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

When choosing an RJ45, ensure that if one end is EIA/TIA568A, the other end is also EIA/TIA568A.

When choosing an RJ45, ensure that if one end is EIA/TIA568B, the other end is also EIA/TIA568B.