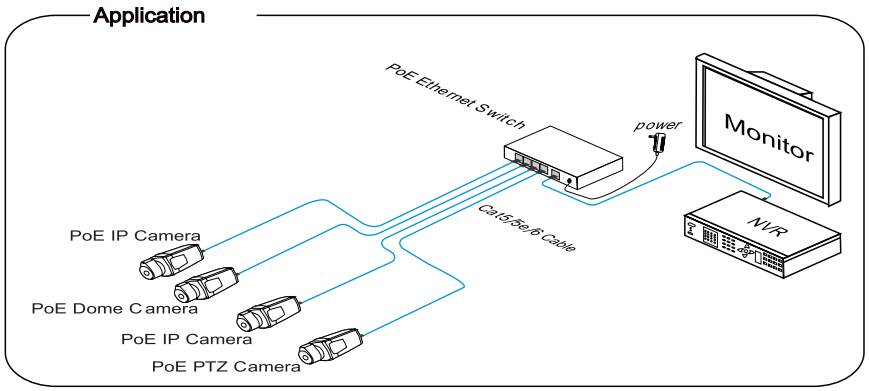
8xGbE(PoE)+ 2xGbE RJ45 Switch User Manual

The **10 Port/8 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.



Features

- The AI DIP switch includes four modes:
  VLAN: Ports 1-8 do not communicate with each other; they communicate only with uplink ports. This controls broadcast storm and strengthens security.
  Extend: Ports 1-8 communicate with each other and with uplink ports. Ports 1-8 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 8 10/100/1000Base-T ports + 2 Gigabit RJ45 ports.
- Provides 8 PoE+ ports (up to 30W) with 90W total PoE power budget.
- High back-plane bandwidth 20 Gbps.
- IEEE 802.3x flow control.
- Surge protection for power port and data ports.
- Supports dual DC power input.

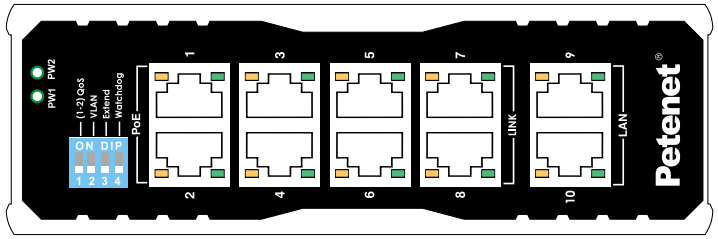
Notice

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

8xGbE(PoE)+ 2xGbE RJ45 Switch

Front

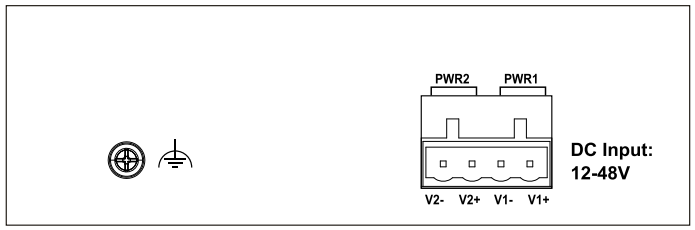


Gigabit PoE Ethernet Port

Gigabit RJ45

Used to switch between different working modes

Back



Installation Steps

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

8xGbE(PoE)+ 2xGbE RJ45 Switch	1 pcs
Accessory	1 pcs
User manual	1 pcs

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 1-8 of the PoE Switch.
3. Use network cable to connect equipment to the uplink port and NVR or computer.
4. Connect the AC power cable to the unit.
5. Confirm that 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.

Specifications

Item			Description
Power	Power Supply		External Power Supply
	Voltage Range		INPUT:12-48V DC OUTPUT:56V DC
	PoE Power Budget		90W for PoE
Ethernet	Speed		Ports 1 to 8: 10/100/1000Mbps PoE+ (Up to 30W) Ports 9 to 10: 1000 Mbps (RJ45)
	Transmission Distance		RJ45: 328 ft. (100 meters)
Network Switch	Ethernet Standard		IEEE 802.3 / 802.3u / 802.3ab / 802.3af / 802.3at
	Switching Capacity		20 Gbps
	Transfer Rate		14,880 pps for 10 Mbps 148,800 pps for 100 Mbps 1,488,000 pps for 1000 Mbps
	MAC Address		4K 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~70°C
	Storage Temperature		-40°C~70°C
	Port surge		6KV
	Humidity Non-Condensing		0~90%
Mechanical	Dimension		152 x 122 x 57mm
	Color		Black

Specifications are subject to change without prior notice.

Troubleshooting

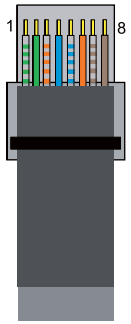
- Make sure the equipment is installed according to the manufacturer's installation guide.
- Confirm RJ45 cable order meets EIA/TIA 568A or 568B standard.
- Every PoE port can provide PoE equipment maximum power less than 30W, please do not connect the PoE equipment with power over 30W.
- Replace the equipment with a proper functioning PoE Ethernet Switch to check if the equipment is damaged.
- Total PoE power between all 8 PoE ports is limited to 90W.

Plug Producing Method

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

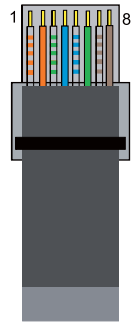
1. Please remove 2cm of the insulating layer and bare 8 pairs UTP cable.
2. Separate the 8 pairs of UTP cable and straighten.
3. Line up the 8 pieces of cables per EIA TIA 568A or 568B.
4. Cut off the cables to leave 1.5cm bare wire.
5. Plug 8 cables into RJ45 plug make sure each cable is in each pin.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