

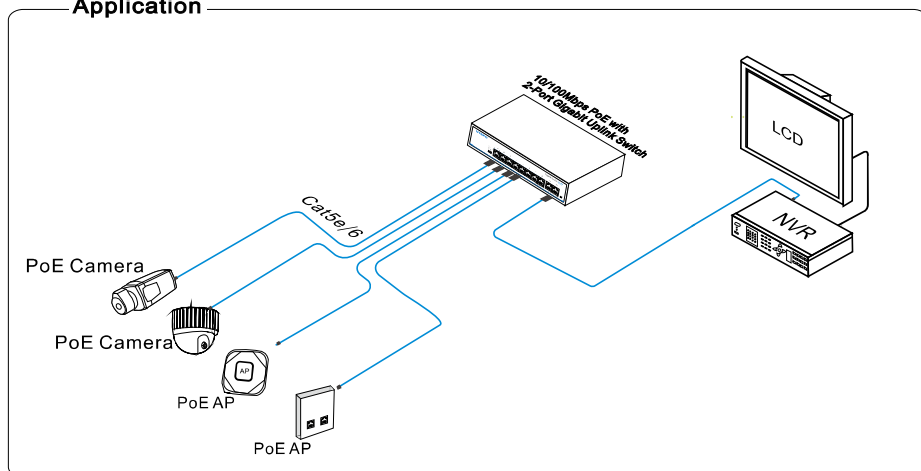
# 16/24-Port 10/100Mbps PoE Switch with 2 Gigabit Uplink Ports

## User Manual

13.238.101.1719  
V2.0

The series switches provide 16/24\*10/100Mbps downlink Ethernet ports (PoE) and 2\*10/100/1000Mbps uplink Ethernet ports, which are widely used in HD video monitoring system and network project etc. PoE ports 1~16/24 complies IEEE802.3af/at standard, and PoE output power of each port can be up to 30W. The surge immunity level reaches 6kV and ESD protection is up to 6kV contact discharge, 8kV air discharge. The switches support 3 operating modes (Default, VLAN, CCTV) and fully meet the application requirement of security network video monitoring & networking project in hotel, campus, and small & medium-sized enterprise.

### Application



### Feature

- Providing 16/24\*10/100Mbps downlink Ethernet ports and 2\*10/100/1000Mbps uplink Ethernet ports.
- Support IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3x, IEEE802.3af/at.
- Support 16/24\* PoE ports, max PoE power output is 30W.
- One-key smart: Default, CCTV, VLAN.
- 6KV surge immunity, ESD protection.
- Operating temperature: -10°C~50°C.
- Plug and play, user-friendly operation. Support installation of desktop, wall mounted, and rack mounted.

### Notice

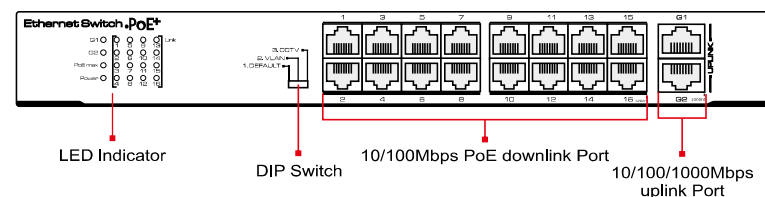
It is recommended to use the standard Cat5e/6 network cable to reach the optimal transmission distance.

## 16/24-Port 10/100Mbps PoE Switch with 2 Gigabit Uplink Ports

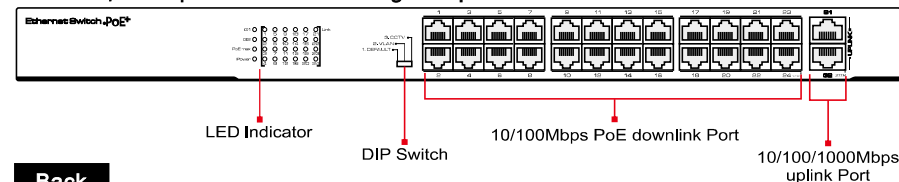
### Board Diagram

#### Front

#### 16-Port 10/100Mbps PoE Switch with 2 Gigabit Uplink Ports



#### 24-Port 10/100Mbps PoE Switch with 2 Gigabit Uplink Ports



#### Back



### Notice

It is recommended that the equipment should be connected to the protection ground for better protection performance, otherwise equipment protection will greatly reduced; Please use 20AWG or thicker wire to connect grounding terminal to the ground.

### Installation Steps

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

- |                 |      |
|-----------------|------|
| • PoE Switch    | 1pc  |
| • Power Cable   | 1pc  |
| • Mounting Kits | 2pcs |
| • User Manual   | 1pc  |

#### Please follow installation steps as below:

- 1) Please turn off the signal source and the device's power, installation with power on may damage the device.
- 2) Use network cables to connect IP cameras with the product's downlink Ethernet ports.
- 3) Use another network cable or (optical fiber) to connect switch's uplink port with NVR or computer.
- 4) Connect switch with power adapter.
- 5) Check if the installation is correct and device is good, make sure all the connection is reliable and power up the system.
- 6) Make sure every network device power supply works normally.

## Specification

| Item                   | Description                                                                                                                                                                          |                                                       |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Model                  | 16-Port 10/100M PoE Switch                                                                                                                                                           | 24-Port 10/100M PoE Switch                            |
| Downlink Ports         | 16*10/100Base-T(PoE)                                                                                                                                                                 | 24*10/100Base-T(PoE)                                  |
| Uplink Ports           | 2*10/100/1000Base-T RJ45                                                                                                                                                             |                                                       |
| Standards              | IEEE 802.3,802.3u,IEEE802.3ab,IEEE802.3z,IEEE802.3x                                                                                                                                  |                                                       |
| Switching Capacity     | 7.2Gbps                                                                                                                                                                              | 8.8Gbps                                               |
| Packet Forwarding Rate | 5.2Mpps                                                                                                                                                                              | 6.4Mpps                                               |
| Forwarding Modes       | store and forward                                                                                                                                                                    |                                                       |
| Packet Buffer          | 2.75Mbits                                                                                                                                                                            |                                                       |
| MAC Table              | 8k                                                                                                                                                                                   |                                                       |
| PoE Standard           | 802.3af/at(PSE)                                                                                                                                                                      |                                                       |
| PoE Pin Assignment     | 1/2(+),3/6(-)                                                                                                                                                                        |                                                       |
| PoE Power Output       | PoE(Single port)≤30W(54V DC)<br>Total PoE Budget≤135W                                                                                                                                | PoE(Single port)≤30W(54V DC)<br>Total PoE Budget≤225W |
| Three Working Modes    | Default: All of the ports could communicate freely.                                                                                                                                  |                                                       |
|                        | VLAN: Port 1~16/24 are isolated respectively, but can communicate with uplink ports, support PoE watchdog.                                                                           |                                                       |
|                        | CCTV: The transmission distance can be extended to 250 meter, while link speed of downlink ports 1~16/24 will be limited to 10Mbps(Uplink ports keep 100Mbps). Support PoE watchdog. |                                                       |
| Surge Immunity         | Common mode 6KV, Execute standard: IEC61000-4-5                                                                                                                                      |                                                       |
| ESD Protection         | Contact discharge 6K, Air discharge 8KV, Execute standard: IEC61000-4-2                                                                                                              |                                                       |
| Input Voltage          | AC100~240; 50/60 Hz                                                                                                                                                                  |                                                       |
| Power Consumption      | <10W                                                                                                                                                                                 |                                                       |
| Operating Temperature  | -10℃~50℃                                                                                                                                                                             |                                                       |
| Storage Temperature    | -40℃~85℃                                                                                                                                                                             |                                                       |
| Operating Humidity     | 5%~95% (Non-condensing)                                                                                                                                                              |                                                       |
| Dimension (W*D*H)      | 294mm*180mm*44mm                                                                                                                                                                     | 440mm*180mm*44mm                                      |
| Weight                 | 2kg                                                                                                                                                                                  | 2.32kg                                                |

Products are subject to change without prior notice.

## Trouble Shooting

Please find the following solution when the device doesn't work

- Please confirm if the installation is correct.
- Please confirm if the RJ-45 cable order is following the EIA/TIA568A or 568B industry standards.
- It can not exceed maximum 30 watts of each port.
- Please replace the failed device with a normal one to check if the device is broken, if the problem still exists, please contact the factory.

## RJ 45 Making Method

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

- 1) Shuck off about 2cm long the insulating layer, and bar the 4 pairs UTP cable;
- 2) Depart the 4 pairs UTP cable and straighten them;
- 3) Line up the 8 pieces of cables per EIA/TIA 568A or 568B;
- 4) Cut out 1.5 cm cable wrap and leave the bare wire;
- 5) Plug 8 cables into RJ45 plug, make sure each cable is in each pin;
- 6) Then use wire crimper to crimp it;
- 7) Follow the 5 steps above to make the another end, following the same sequence of the first plug;
- 8) Using network tester to test the cable whether is working.

| 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 choose RJ-45 make sure if one end is EIA/TIA568A,the other end should also be EIA/TIA568A.
- When choose RJ-45 make sure if one end is EIA/TIA568B,the other end should also be EIA/TIA568B.