# 16 Ports PoE Switch
User Manual
VerB 1.0

The 16 ports PoE switch is an unmanaged PoE Ethernet switch along with 16 * 100Base-TX downlink PoE ports and 2 * 1000Base-TX uplink Ethernet ports featuring 30-watt 802.3at PoE+ as well as 1 additional Gigabit Combo port. The total PoE power budget is up to 180 watts. It supports real-time PoE output LED display.The device can be widely used in video security monitoring systems, network projects, etc.
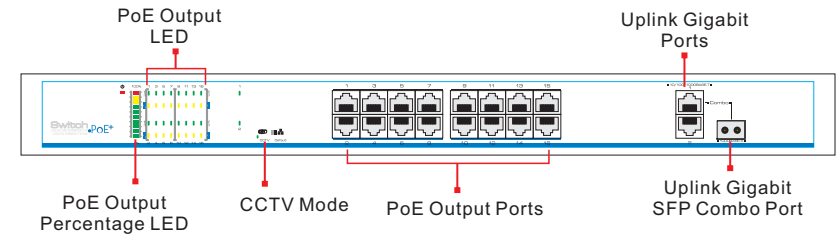
Application
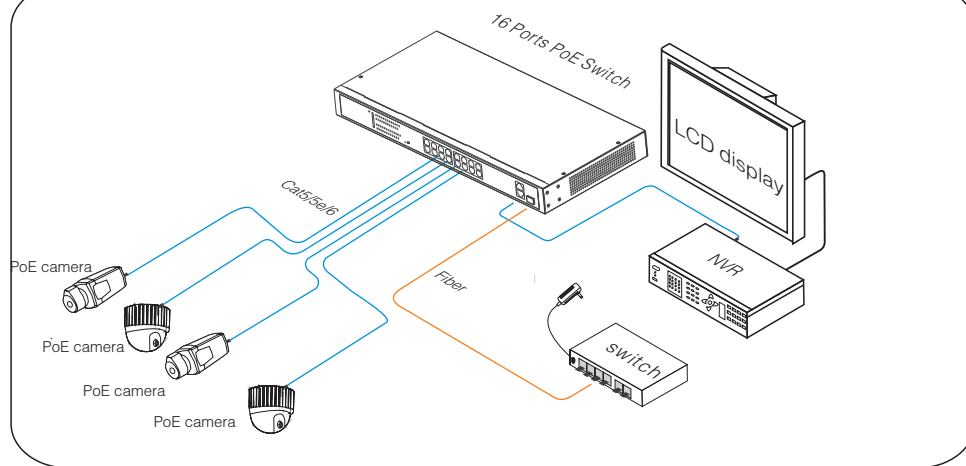
■Feature

● Provide 16x 100Mbps downlink PoE Ethernet ports, 2x gigabit uplink Ethernet ports and 1x gigabit Fiber port;

● Downlink Ethernet ports support PoE+, each port supports max. 30W output;

● Support power consumption indication（LED indicates power output status);

● Accord with IEEE802. 3、IEEE802. 3u、IEEE802. 3ab、IEEE802. 3 af/at standard;

● 4K MAC address,2. 75Mb cache;

● Quick installation, easy operation, convenient for wall-mounted、 desktop and rack installations.
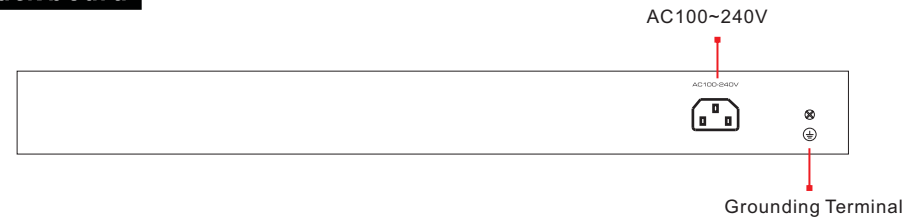
⚠ Notice

The transmission distance depends on the signal source and cable quality; standard Cat5e/6 Ethernet cable is strongly suggested for reaching the maximum transmission distance!

■Board diagram

Front board

PoE Output LED
Uplink Gigabit Ports
PoE Output Percentage LED
CCTV Mode
PoE Output Ports
Uplink Gigabit SFP Combo Port

Back board

AC100~240V
Grounding Terminal

⚠ Notice

1) Device must be connected with lightning protection grounding; otherwise protection level will be greatly reduced; please use above No.20 wire to connect the grounding terminal;

2) The device requires rebooting after the dial switch has been utilized.

■Installation steps

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

● 16 Ports PoE Switch   1pcs
● AC Power Cable   1pcs
● Accessories   1pcs
● User Manual   1pcs

Please follow installation steps as below:

1) Turn off the power of all the related devices before the installation; otherwise the device would be damaged;

2) Use Ethernet cable connect PoE IP camera and 1~16 downlink ports of product respectively;

3) Use an Ethernet cable to connect equipment uplink port with NVR or computer;

4) Connect power adapter;

5) Check if the installation is correct, equipment is in good condition, the connection is stable, then power on for system.

■ Specification

Item		Description
Product Type	Product Type	16ports
Port Description	Downlink Ethernet Ports	16×10/100Base-TX PoE+
	Uplink Ethernet Ports	2×10/100/1000Base-T+1×1000Base-X(combo)
	Power Input	1×AC Female Terminal
	Grounding Terminal	1×Grounding Terminal
PoE&Power	Power Input	Mains on load,100~240VAC 50/60Hz
	PoE Power Supply	End-span(1/2，3/6),IEEE802.3 af/at
	PoE Max. Power Output	180W
	Single Port Power Output& Voltage	Single Port PoE Power Output≤30W， Voltage 54VDC
One-key CCTV	CCTV Mode	1. Downlink ports only communicate with uplink ports; 2. Restrain network storm under 2Mbps; 3.Extend transmission distance to 250m; 4.Rate:10Mbps(Downlink Ports)
Network Parameters	Network Standard	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab,IEEE 802.3z
	Transmission Distance	100m(Max.)
	Exchange Capacity	7.2Gbps
	Packet Transfer Rate	5.36Mpps
	MAC Address	4K
	Packet Data Cache	2.75Mb
Indicators Status	Power Input	1x Red LED
	Downlink Ethernet Ports	Link:16x Green LED PoE:16x Yellow LED
	Uplink Ethernet Port Link	2x Green LED
	PoE Power Output Percent	5x LED(Including 3x Green, 1x Yellow, 1x Red), separately indicate 30%、60%、90%、95%~100%
Protection Level	ESD	6KV/8KV, Per:IEC61000-4-2
	Surge Protection	6KV, Per:IEC61000-4-5
Operation Environment	Operation Temperature	-10℃~45℃
	Storage Temperature	-40℃~85℃
	Humidity(Non-condensing)	0~95%
Mechanics	Dimensions(LxWxH)	442mm*285mm*44.5mm
	Material	Iron
	Color	Black

Product specifications subject to change without prior notice.

■ Trouble shooting

If any trouble in installation, please follow these steps:

● Please make sure you have followed the instruction to install the device;
● Please confirm if the RJ45 cable order is in accordance with the EIA/TIA568A or 568B industry standards;
● The power supply of each PoE port is no more than 30W; please do not connect the PoE device which exceeds the maximum PoE power supply;
● Please replace a failure device with a proper one to check if the device is broken.

■ 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 bare 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.