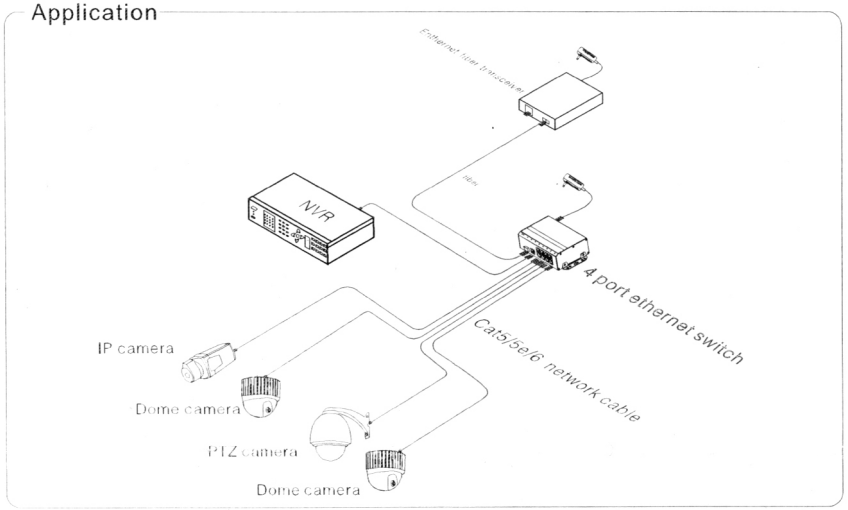
4 Ports Ethernet Switch

This product is un-managed ethernet switch which provides four 100Mbps ethernet ports ,one optical port and one ethernet port (100Mbps). It also supports IEEE802.3 /802.3u /802.3ab /802.3z /802.3x, 10/100/100Mbps, full/ half duplex, MDI/MDI-X adaptive RJ 45 port , Anti-thunder capability reaches 2KV. The product could be used in security network video surveillance, network project etc.

Application



Feature

- Provide four10/100Mbps ethernet ports and support IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX standard ;
- Provide two uplink ports, 100Mbps optical port and ethernet port ; uplink optical port reserves SFP port for users to select SFP fiber modules of different performance to solve long distance transmission issue;
- The uplink port maximum transmission distance is 150m, breaking the 100 m limits;
- Support IEEE802.3X full duplex flow control and port (Auto MDI/MDIX) function;
- Redundant power design, support Hot Backup Power;
- Quasi-industrial products, fan-free heat folds metal design;
- Excellent circuit isolation protection. Anti-thunder ability up to 2KV;
- Fast installation, easy operation, convenient for wall-hung ,din rail and desktop installation.

Caution

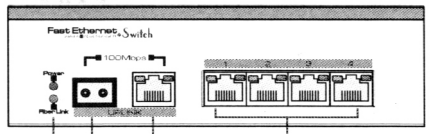
1) Transmission distance is related to the connecting cable. We suggest to use standard Cat5e/6 network cable to get 150m transmission distance.

2)If using optical port, customer need to purchase SFP module additional.

3) The equipment must connect anti-thunder ground, otherwise the protection level of the equipment will be greatly reduced; please use 20th or over wire connect ground port to the ground ,

Board diagram

Front board



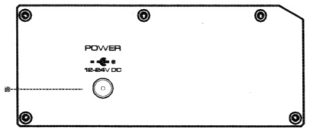
SFP fiber port

Uplink ethernet port

Ethernet port

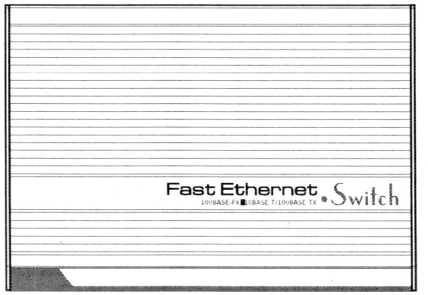
Power/uplink fiber indicator

Left board

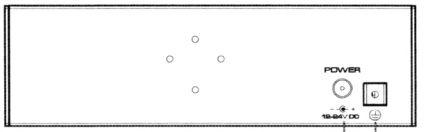


Power input

Top board



Back board



Ground port

Power input

Instruction:

1) Front board has 4pcs ethernet ports , RJ 45 port green light indicating network status ; 2 uplink ports , 1 SFP port and 1 ethernet port , the low left side green LED indicates optical port working status, red LED indicates power status, ethernet port RJ 45 green light indicates ethernet port network working status;

2) Left and back board all have one DC12V ~ 24V power input and one power adapter by default; Users need to buy another power adapter if redundant power is required..

Installation step

Please check the following items before installation. If any missing, please contact the dealer.

● 4 port ethernet switch	1PC
● Power adapter	1PC
● Hanger	2PCS
● Guide hangers	1PC
● User manual	1PC

Please follow the following installation steps

1) Please turn off the signal source and the device's power, installation with power on may damage the device;

2) Use 4 network cables to connect 8 IP cameras with POE switch's1~4PoE port;

3) Use another network cable or (optical fiber) to connect PoE ethernet switch's UPLINK port with NVR or computer;

4) Connect PoE switch with power adapter;

5) Check if the installation is correct and device is good, make sure all the connection is reliable and the system is powered on;

6) Make sure every network device has power supply and work normally.

Specification

Item		Description
Power	Power supply	Power adapter
	Voltage range	DC 12V ~ 24V
	Consumption	< 5W
Network port parameter	Network port	1 ~ 4 port: 10/100Mbps ethernet port UPLINK port : 10/100Mbps ethernet port SFP: 100Mbps fiber SFP module port
	Transmission distance	Ethernet port:0 ~ 150m SFP: depend on the optical module transmission performance
	Transmission medium	Cat5/5e/6 standard network cable
Network exchange specification	Network standard	IEEE802.3 10BASE-T,IEEE802.3u 100BASE-TX,IEEE802.3u 100BASE-FX,IEEE802.3 X
	Exchange way	Store and forward
	Packet data cache	512K
	MAC address list	2K
Status indicator	Power indicator	1 indicate power (red)
	Optical port LED indicator	1 SFP port working indicator ,green
	Uplink network port LED	1 network working status indicator,RJ45 port green light
	Network port LED indicator	4 network working status indicator,RJ45 port green light
Protection level	Communication port lightning protection	3 level, standard: IEC61000-4-5
	ESD	3 level, standard: IEC61000-4-2
Operation environment	Working temperature	-40℃~75℃
	Storage temperature	-40℃~85℃
	Humidity (non-condesing)	0~95%
Mechanical	Dimension (L×W×H)	159mm×110mm×46.5mm
	Material	Aluminum
	Color	Black
	Weight	533g

Product are subject to change without prior notice

Trouble Shooting

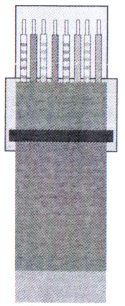
Please find the following solution when the device doesn't work

- Please confirm if the installation is correct;
- Please confirm if the RJ45 cable order is in accordance with the EIA/TIA568A or 568B industry standards;
- SFP fiber communication requires double fiber need Cross-conneciton.
- Please replace a failure device with a normally working one to check if the device is broken;
- If the problem still exist, please contact the factory.

RJ 45 Making Method

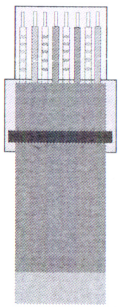
ITools to make RJ45: wire crimper, network tester.
Wire sequence of RJ45 plug should conform with EIA/TIA568A or EIA/TIA568B standard.
1) Strip off the 2cm insulating layer to expose the 4 pairs UTP cable;
2) Seperate the 4 pairs of UTP cable and straighten them;
3) Line up the 8 separated pieces of cables per EIA/TIA 568A or 568B;
4) Cut the cables to leave 1.5cm bare wire and make sure 8 thread ends are flat and neat ;
5) Insert 8 cables into RJ45 plugs, make sure each cable is inserted in each pin;
6)Then use wire crimper to crimp the RJ45;
7) Do the above 5 steps again to make the another end of the twisted pair and make sure consistent cable order between two ends ;
8) Test network cables with network tester.

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.