Model: FS-S1004GP-2G(60W)

Features

4-**Port 10/100/1000Mbps IEEE 802.3af/at PoE Switch (End-Span PSE)**

•Comply with IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3az, IEEE802.3af/at standards

•Support IEEE802.3x full-duplex flow control; support Auto MDI/MDIX

•4-Port support 48V-56VDC power to PoE powered devices

•Provide 15.4W or 30W power to powered devices

•60-watts PoE budget

•External 53VDC/1.25A power adapter included

•Extra 2-Port 10/100/1000Mbps UPLINK RJ-45

•PoE data & power transmission distance up to 100meters

•Port based VLAN for Enhancing Security

•Backplane Bandwidth: 12Gbps

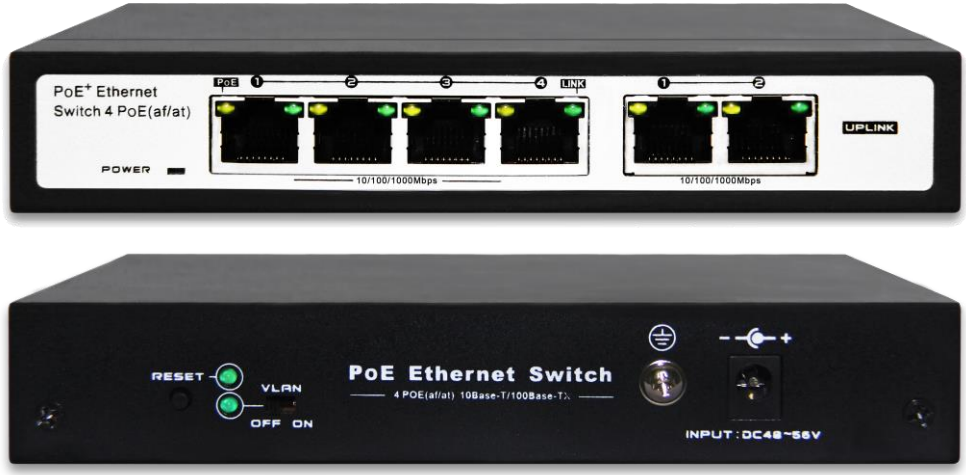
•Excellent anti-thunder, anti-static and anti-interference ability

•Surge Protection: 6KV

•Restart function helps master IC reset wholly.

•Easy and convenient to use, plug & play, no need to configure

•Galvanized housing for stable and durable working life



Overview

The FS-S1004GP-2G provides 4-port 10/100/1000Mbps IEEE 802.3af/at Power over Ethernet with a total of 60 watts of PoE budget, which is an ideal solution to fulfill the demand of sufficient PoE power for network applications. It's able to drive 8 IEEE 802.3af/at compliant powered devices.

The FS-S1004GP-2G is an ideal solution for securing IP surveillance infrastructure. It provides both 802.3af/at PoE functions along with 4 x 10/100/1000Base-TX ports featuring 15.4-watt 802.3af/30-watt 802.3at PoE in RJ-45 interfaces and extra 2 x 10/100/1000Mbps UPLINK RJ-45 ports to keep a cascade connection with another switch or NVR. For instance, one FS-S1004GP-2G can be combined with one 4-Channel NVR and four PoE IP cameras as a kit for the administrators to centrally and efficiently manage the surveillance system in the local LAN and the remote site via Internet.

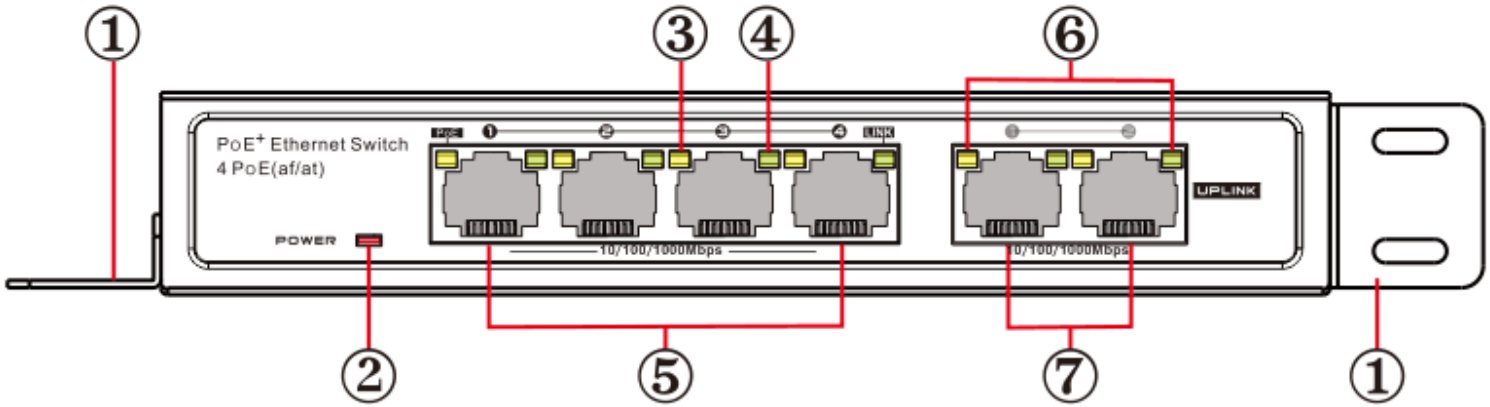
The FS-S1004GP-2G RJ-45 interfaces support 10/100/1000Mbps Auto-Negotiation at downlink port from 1 to 4 and 10/100/1000Mbps uplink port from 1 to 2 for optimal speed detection through RJ-45 Category 6, 5e or 5 cables. It also supports standard Auto-MDI/MDI-X that can detect the type of connection to any Ethernet device without requiring special straight or crossover cables.

The FS-S1004GP-2G supports port-based VLAN function, which effectively prevent the whole system from internet broadcast storm to make the data transfer much safer.

With data and power over Ethernet formed one unit, the FS-S1004GP-2G reduces cabling requirements and eliminates the need for dedicated electrical outlets on the wall, ceiling or any unreachable place. A wire that carries both data and power can lower the installation costs, simplify the installation effort and eliminate the need for electricians or extension cords. Providing 4 PoE interfaces, the FS-S1004GP-2G is ideal for small businesses and work-groups requiring deploying the PoE for the wireless access points, IP-based surveillance IP phones in any place easily, efficiently and cost-effectively.

Front & Rear Panel

Front Panel



① Rack-mounting ears: Cabinets for product installation or Wall installation

② Power Indicator: **Red** Light on: with power Light off: no power

③ PoE Indicator: **Yellow** Light on: when device is powered Light off: when device is not detected or powered

④ Link / Act Indicator: **Green** LED on: link up off: link down blinks: data transferring

⑤ Downlink Port: Transfer data from other IP devices to the switch

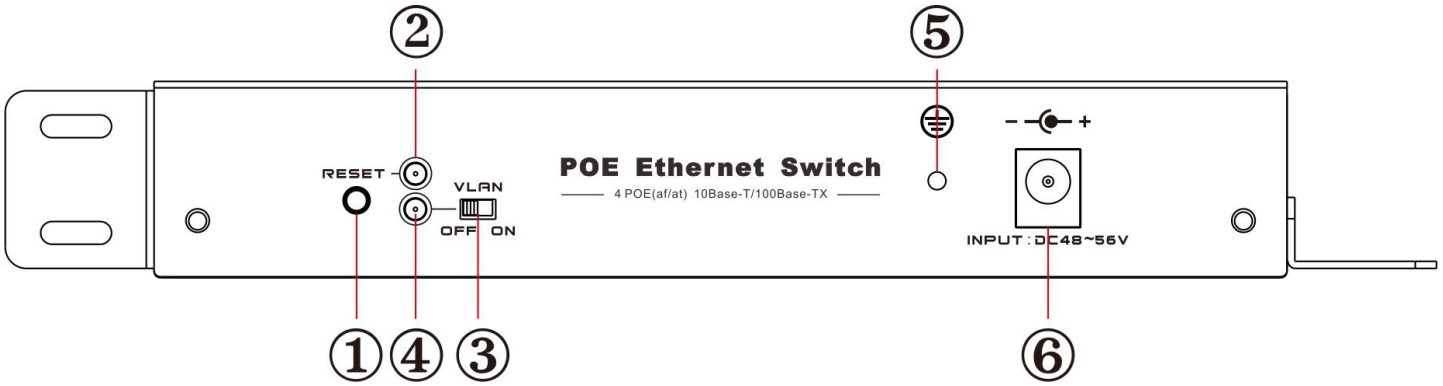
⑥ Uplink Indicator: **Green** LED on: link up off: link down blinks: data transferring

Yellow LED on: link speed is 1000Mbps off: link speed is 10/100Mbps

⑦ Uplink Port: Transfer data from PoE ports to other devices (NVR/Switch/ADSL)

Rear Panel

Rear Panel



① Reset Button: Press the reset button to turn on indicator and the device restarts.

② Reset Button Indicator: Green

③ VLAN Button: Turn on VLAN button: indicator on and VLAN function starts Turn off VLAN button: indicator off and VLAN function stops

④ VLAN Indicator: Green

⑤ Ground Connection

⑥ Input: DC 48~56V

VLAN Introduction

At present, applications of Ethernet switch are very wide. To satisfy the needs of various customers, it is urgent for network services to solve the problems of broadcast domains, bandwidth and security, so a new kind of technology of VLAN emerged.

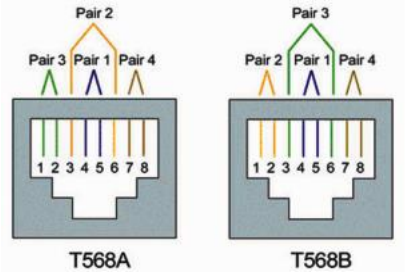
Each DOWNLINK RJ-45 port and UPLINK RJ-45 port form a separate workstation respectively. In the same VLAN workstation, regardless of which switch they are actually connected to, the communication between them is as if they were on a separate switch. Broadcasts in the same VLAN can only be heard by members of the VLAN, but not in other VLANs, which can control the generation of unwanted broadcast storms. At the same time, if there is no routing, different VLANs cannot communicate with each other, which increases the security of different departments in the enterprise network.

When the VLAN mode is enabled, the data cannot be forwarded among DOWNLINK RJ-45 ports, but DOWNLINK ports and UPLINK RJ-45 port can communicate with each other.

Note:

After you turned on VLAN button, please press reset button or reboot the device, then VLAN mode is enabled.

RJ 45 Define



	1	2	3	4	5	6	7	8
T568A	White Green	Green	White Orange	Blue	White Blue	Orange	White Brown	Brown
T568B	White Orange	Orange	White Green	Blue	White Blue	Green	White Brown	Brown

How to make a network cable

To create a network cable, you will first need the equipment listed below.

1. Cat5e, Cat6, or Cat7 cable
2. RJ-45 connectors
3. Crimping tool
4. Wire stripper or Knife

The wire sequence of RJ45 connector must comply with international standard of EIA/TIA 568A or EIA/TIA 568B.

1) We recommend stripping at least half an inch of the cable to expose the inner wires.
2) Separate the wires within the cable after the network cable jacket has been removed so that they can be put into the RJ-45 connector.
3) The CAT5 twisted-pair cable consists of four twisted wires, each color coded; 8 wires must be correctly lined as the standards of EIA/TIA 568A or EIA/TIA 568B.
4) Cut thread residue and leave 1.5cm wire exposed outside the insulating layer and ensure 8 wires are straighten and neat.
5) Place the cable into the RJ-45 connector and then use the crimping tool to attach the connector.
6) Repeat above steps for the other end of the cable; the wire sequence of both ends of the cable is suggested to be identical.
7) Make sure to test the cables before installing them once both ends of the cable have been completed.

Note:

1. All RJ-45 Ports of this device support Auto MDI/MDIX, so the different wire sequence of both ends of the cable is allowed.
2. Up to three units can be cascaded.

Quick Setup Guide

Package Contents

1) FS-S1004GP-2G: 1pc
2) 53VDC/1.25A Power adapter: 1pc
3) Screw: 5pcs
4) Rubber feet: 4pcs
5) Mounting-ears: 2pcs
6) Manual: 1pc

Step 1: Begin with all input/output devices turned off and power cables are removed.

Step 2: Connect RJ-45 port of PoE cameras with Downlink port of PoE switches over standard Cat 5e/6 cables.

Step 3: Connect Uplink port of PoE switches with RJ-45 port of NVR or computer or other devices over standard Cat 5e/6 cables.

Step 4: Connect 53VDC/1.25A power adaptor with PoE switches.

Step 5: Make sure above connection is properly finished, then turn on the power.

Technical Specifications

Model		FS-S1004GP-2G(60W)
Product Name		4-Port 10/100/1000Mbps IEEE 802.3af/at PoE Switch (End-Span PSE)
Power Supply	Power Supply Mode	Power Adaptor
	Voltage Range	DC48~56V
	Power Consumption	The device <5W PoE power supply ≤60W
Network Port Parameter	Network Port	Ethernet Downlink RJ-45 Port: 4*10/100/1000Mbps Uplink RJ-45 Port: 2*10/100/1000Mbps
	Transmission Distance	1~4 Ethernet Downlink RJ-45 Port: 100m Uplink RJ-45 Port: 100m
	Transmission Medium	1~4 Ethernet Downlink RJ-45 Port: Cat5e/6 standard cable Uplink RJ-45 Port: Cat5e/6 standard cable
	PoE Standards	IEEE802.3af/at
	PoE Power Supply Mode	End-span method
	PoE Power Supply Wattage	Each port ≤30W Whole device≤60W
Network Switch Specification	Network Standards	IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3az
	Swap Mode	Store-and- forward
	Data-Caching Mechanism	1M
	MAC Address List	4K
	Backplane Bandwidth	12Gbps
	Forwarding Capacity	8.92Mpps
Indicator/Button	Power Indicator	Red LED on: power on
	Gigabit Ethernet Uplink Port	Green LED on: link up, off: link down, blinks: data transferring Yellow LED on: link speed is 1000Mbps, off: link speed is
	PoE Indicator	4 PoE indicators (Yellow)
	PoE Network Port Indicator	1~4 port indicators blink while data transferring
	Reset Button	Press the reset button to turn on indicator (green) and the device restarts.
	VLAN Button	Turn on VLAN button: indicator on and VLAN function restarts Turn off VLAN button: indicator off and VLAN function stops
Protection Level	Surge Protection	6KV (common mode),10/700us IEC61000-4-5 2KV (differential mode),10/700us IEC610000-4-5
	Electrostatic Protection	Contact Discharge: ±4KV Air Discharge: ±6KV Standard: IEC61000-4-2
Reliability	Mean time between failures (MTBF)	＞50000h
Mechanical	Dimensions (L*W*H)	160mmx94.3mmx27mm
	Housing	Galvanized
	Body Color	Black
	Net Weight	425g
Environmental	Operating Temperature	0℃~55℃
	Storage Temperature	-40℃~70℃
	Relative Humidity	0~95% (non-condensing)

Applications

- Security Monitoring System
- Multimedia Network Teaching System
- Medical Monitoring Display System
- Industrial Automation Control System
- Banking, securities, financial information display system
- Remote Network Server Monitoring
- Department Store Security
- Casino Security
- Hospitals, Airports and banks
- School Campuses

Application Diagram