

# FGSD-1011HP

# 8-Port 10/100TX 802.3at PoE + 1-Port 10/100/1000T + 1-Port 100/1000X SFP Desktop Switch



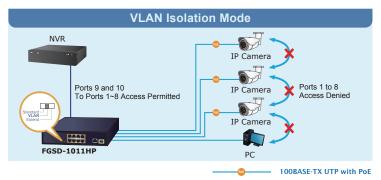
#### Centralized Power Distribution for HD IP Surveillance System

The FGSD-1011HP, a new member of the PLANET 802.3at PoE Fast Ethernet Switch family, provides 8-port 10/100Mbps 802.3af/at Power over Ethernet, 1 Gigabit port and 1 Gigabit SFP port with a total of 120 watts of PoE budget. Its power budget is more than enough for any network applications with Fast Ethernet speed transmission. The eight 802.3af/at PoE ports feature PoE power injector function which is able to drive 8 IEEE 802.3at compliant powered devices. The FGSD-1011HP also offers a simple, cost-effective and non-blocking wire-speed performance. It comes with a 9-inch compact metal housing, suitable for desktop deployment in SOHO office or department network application.



#### Distance Extended for Transmission of Power and Data

The built-in solid DIP switch provides "Standard", "VLAN" and "Extend" operation modes. The FGSD-1011HP operates as a normal IEEE 802.3af/at PoE Switch in the "Standard" operation mode. The "VLAN" operation mode features port-based VLAN function that can help to prevent the IP camera's multicast or broadcast storm from influencing each other.



#### **Physical Port**

- 8 10/100Mbps Fast Ethernet ports
- 1 10/100/1000BASE-T Gigabit Ethernet port
- 1 100/1000BASE-X mini-GBIC SFP interface

#### Power over Ethernet

- Complies with IEEE 802.3af/at Power over Ethernet endspan
- · Up to 8 IEEE 802.3af/at devices powered
- · Supports PoE Power up to 30 watts for each PoE port
- 120-watt PoE budget
- 8 ports supporting 54V DC power to PoE powered device (Port 1 to port 8)
- Hardware DIP switch for "Standard", "VLAN" and "Extend" mode selection; the "Extend" mode features 30-watt PoE transmit distance of 250m at speed of 10Mbps and VLAN isolation
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100m in standard mode

#### Switching

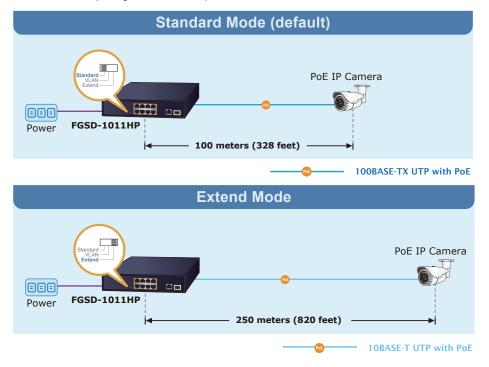
- Hardware-based 10/100/1000Mbps auto-negotiation and auto MDI/MDI-X
- Flow control for full duplex operation and back pressure for half duplex operation
- Integrates address look-up engine, supporting 8K absolute MAC addresses
- Automatic address learning and address aging
- Solid DIP switch to isolate ports to prevent broadcast storm and defend DHCP spoofing

#### Hardware

- · 9-inch desktop size, 1U height, mountable
- · LED indicators for PoE ready/activity and LINK/ACT
- · Fanless design
- Internal AC power supply
- Supports Energy-Efficient Ethernet (EEE) function (IEEE 802.3az)



In the "Extend" operation mode, the FGSD-1011HP operates on a per-port basis at 10Mbps duplex operation but can support 30-watt PoE power output over a distance of up to 250 meters overcoming the 100m limit on Ethernet UTP cable. With this brand-new feature, the FGSD-1011HP provides an additional solution for 802.3af/at PoE distance extension, thus saving the cost of Ethernet cable installation. Its VLAN isolation function isolates each port so as to prevent broadcast storm and defend DHCP spoofing in the "Extend" operation mode.

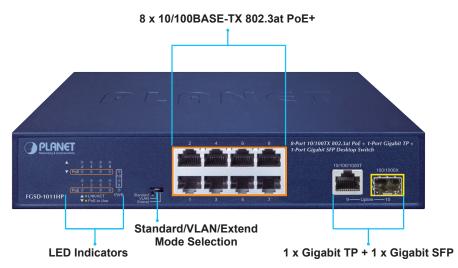


#### Two Gigabit Uplink Ports

The FGSD-1011HP comes with two uplink ports with 1000Mbps transfer rate to ensure high-speed data and video transmission, reliable assurance for connection between the surveillance system and outside network where the eight PoE+ ports can be used to their full potential.

#### Fiber-Optic Link Capability Enables Extension of Network Deployment

The mini-GBIC slot built in the FGSD-1011HP supports SFP auto-detection and dual speed as it features 100BASE-FX and 1000BASE-SX/LX SFP (Small Form-factor Pluggable) fiber-optic modules, meaning the administrator now can flexibly choose the suitable SFP transceiver based on the transmission distance or the transmission speed required to extend the network efficiently. The distance can be extended from 550 meters to 2 kilometers (multi-mode fiber) and 10/20/30/40/50/60/70/120 kilometers (single-mode fiber or WDM fiber). They are well suited for applications to uplink to backbone switch and monitoring center in long distance.







#### **Robust Protection**

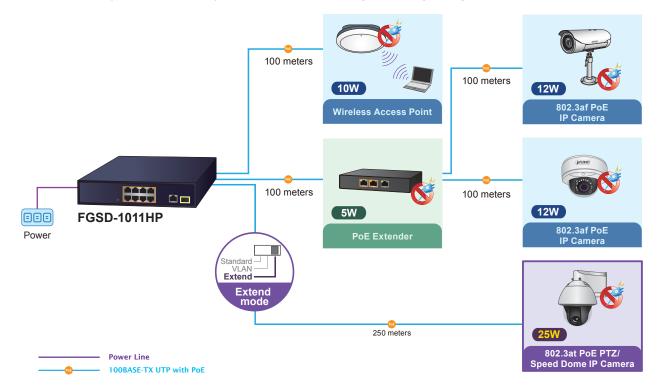
The FGSD-1011HP protects against the ESD 4KV surge to improve product stability and also protects users' networks from devastating ESD attacks, making sure the flow of operation does not fluctuate.

#### Environment-friendly, Fanless Design for Silent Operation

The FGSD-1011HP comes with a desktop-sized, compact metal housing, making the placement of the unit convenient. It features a ventilated construction in which a cooling fan is not necessary, thereby making its operation noiseless. Moreover, the FGSD-1011HP is able to operate reliably and stably in any environment without affecting its performance. The deployment of PoE PDs with constant power feeding can be easily and quickly done.

#### Easy Installation and Cable Connection

As data transfer and high PoE are transmitted over a cable, the FGSD-1011HP is able to reduce the need of extended cables and electrical outlets on the wall, ceiling or any unreachable place. It helps to lower the installation costs and simplify the installation effort. All RJ45 copper interfaces of the FGSD-1011HP support 10/100/1000Mbps auto-negotiation for optimal speed detection through RJ45 Category 6, 5 or 5e cable. It also supports standard auto-MDI/ MDI-X that can detect the type of connection to any Ethernet device without requiring special straight-through or crossover cables.

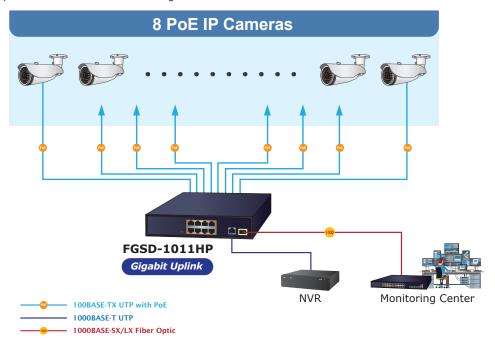




## Applications

#### Perfectly Integrated Solution for IP PoE Camera and NVR System

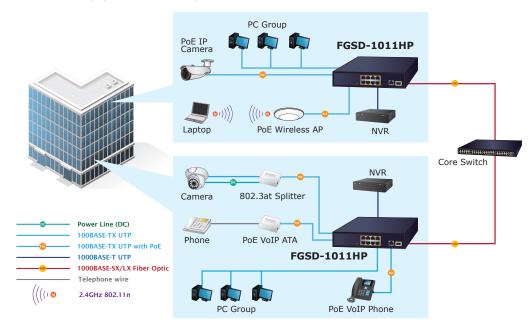
Particularly designed for the growing popular IP Surveillance applications, the FGSD-1011HP 802.3at PoE Switch is positioned as a Surveillance Switch for quick and easy PoE IP camera deployment with power feeding. The FGSD-1011HP provides both 802.3at and 802.3af PoE functions along with 8 10/100BASE-TX ports featuring 30-watt 802.3at or 15.4-watt 802.3af PoE in RJ45 copper interfaces, **1 extra Gigabit TP** and **1 extra Gigabit SFP uplink interface** supporting high-speed transmission of surveillance images and videos.



#### IP Office Department/Workgroup PoE Switch

With the business office expansion, the additional telephones required can be installed with lower cost via the implementation of PoE IP telephony system than that of the traditional circuit wiring telephony system. The FGSD-1011HP 802.3af/at PoE Switch helps enterprises to create an integrated data, voice, and powered network. The IEEE 802.3af compliant IP phones can be installed without an additional power cable because the power can be provided via the standard Ethernet cable from the connected FGSD-1011HP.

The wireless AP group, PoE IP phones and analog telephony adapter work perfectly with the FGSD-1011HP, which injects power through the Ethernet cables. With the FGSD-1011HP, IP telephony deployment becomes more reliable and cost-effective, thus helping enterprises save tremendous costs when upgrading from the traditional telephony system to IP telephony communications infrastructure.





# Specifications

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Model	FGSD-1011HP			
Hardware Specifications				
10/100Mbps Ports	8 10/100BASE-TX MDI/			
Gigabit Ports	1 10/100/1000BASE-T MDI/MDI-X RJ45 port			
SFP Slot	1 100/1000BASE-X SFP/mini-GBIC interface			
PoE Inject Port	8-port with 802.3af/at PoE injector function (Port-1 to Port-8)			
LED Display	System: Power (Green) 10/100BASE-TX RJ45 Interface: PoE (Orange, Port-1 to Port-8) LNK/ACT (Green, Port-1 to Port-8)			
	LNK/ACT (Green, Po 100/1000BASE-X SFP I LNK/ACT (Green, Po	10/100/1000BASE-T RJ45 Interface: ■LNK/ACT (Green, Port 9) 100/1000BASE-X SFP Interface: ■LNK/ACT (Green, Port 10)		
DIP Switch	100m distance in standard mode 250m distance in extend mode (based on the cable category)			
Power Requirements	AC 100~240V, 2.5A max.			
Power Consumption	122 watts, 416.2 BTU			
Dimensions (W x D x H)	220 x 150 x 44 mm			
Weight	1223 g			
ESD Protection	Contact discharge of ±6KV DC			
Air discharge of ±8KV DC				
Surge Immunity	±4KV			
Switching Specifications				
Switch Architecture	Store and Forward switch architecture			
MAC Address Table				
Switch Fabric	8K MAC address table with auto learning function			
Switch Throughput	5.6Gbps			
Maximum Packet Size	4.16Mpps @64bytes			
Flow Control	9K bytes Peak proceure for helf duplay: IEEE 202 2x pause frame for full duplay			
	Back pressure for half duplex; IEEE 802.3x pause frame for full duplex			
Power over Ethernet	ver over Ethernet			
PoE Standard	IEEE 802.3af Power over Ethernet/PSE IEEE 802.3at Power over Ethernet Plus/PSE			
PoE Power Supply Type	End-span			
Power Pin Assignment	1/2 (+), 3/6 (-)			
PoE Power Output	Per Port 54V DC, 600mA. max. 30 watts (IEEE 802.3at) Per Port 54V DC, 300mA. max. 15.4 watts (IEEE 802.3af)			
PoE Power Budget	120 watts			
Number of PDs, 7 watts	8			
Number of PDs, 15.4 watts	8			
Number of PDs, 30 watts	4			
Standard Conformance				
EMI Safety	CE, FCC			
	IEEE 802.3 IEEE 802.3u	Ethernet Fast Ethernet		
Standard Compliance	IEEE 802.3ab IEEE 802.3z IEEE 802.3x IEEE 802.3af IEEE 802.3at	Gigabit 1000BASE-T Gigabit SX/LX Flow Control Power over Ethernet Power over Ethernet Plus		
Standard Conformance				
Operating Environment	0 ~ 50 degrees C			
Storage Environment	-10 ~ 70 degrees C			
Operating Humidity	5 ~ 95%, relative humidity, non-condensing			
Storage Humidity	5 ~ 95%, relative humidity, non-condensing			
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### **Ordering Information**

FGSD-1011HP

8-Port 10/100TX 802.3at PoE + 1-Port 10/100/1000T + 1-Port 100/1000X SFP Desktop Switch

## **Related PoE Products**

HDP-5240PT	720p SIP Multi-unit Video Door Phone with RFID and PoE	
HDP-5260PT	720p SIP Multi-unit Apartment Vandalproof Door Phone with RFID and PoE	
ICA-HM620	2 Mega-pixel PoE Plus Speed Dome Internet Camera	
ICA-E6260	2 Mega-pixel PoE Plus Speed Dome IP Camera	
POE-161S	IEEE 802.3at Gigabit Power over Ethernet Plus Splitter with 5V/12VDC Output (10/100/1000Mbps)	
POE-162S	IEEE 802.3at Gigabit High Power over Ethernet Splitter	
IPOE-162S	Industrial IEEE 802.3at Gigabit High Power over Ethernet Splitter	
POE-E201	IEEE 802.3at Power over Ethernet Extender	
POE-E202	1-Port 802.3at PoE+ to 2-Port 802.3af/at Gigabit PoE Extender	
VTS-700P	7-inch SIP Indoor Touch Screen PoE Video Intercom	
HDP-5240PT	720p SIP Multi-unit Door Phone with RFID and PoE	
HDP-5260PT	720p SIP Multi-unit Apartment Vandalproof Door Phone with RFID and PoE	
LRP-101C-KIT	1-Port Long Reach PoE over Coax Extender Kit (LRP-101CH + LRP-101CE)	
LRP-101U-KIT	1-Port Long Reach PoE over UTP Extender Kit (LRP-101UH + LRP-101UE)	

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