

# 4-Port 10/100TX 802.3af/at PoE + 2-Port 10/100TX Desktop Switch



## Centralized Power Distribution for HD IP Surveillance System

PLANET FSD-604HP Desktop Switch provides four 802.3at PoE+ ports for catering to small-scale IP surveillance networks at a lower total cost. With dual 10/100BASE-TX uplink ports, the recorded HD video files from the 4 PoE IP cameras powered by the FSD-604HP are saved in the 4-channel NVR system. Its surveillance software performs comprehensive security monitoring and manages the surveillance system in the local LAN or remote site via Internet.



The FSD-604HP's advanced features are as follows:

- 4-port PoE, 60-watt PoE budget
- Two 10/100Mbps uplink ports
- Can extend distance of up to 250m in the extend mode
- 30-watt power output at speed of 10Mbps
- Internal AC power, fanless design

## RJ45 Interface

- 6 10/100Mbps Fast Ethernet ports
- 4 ports supporting 52V DC power to PoE powered device

## Power over Ethernet

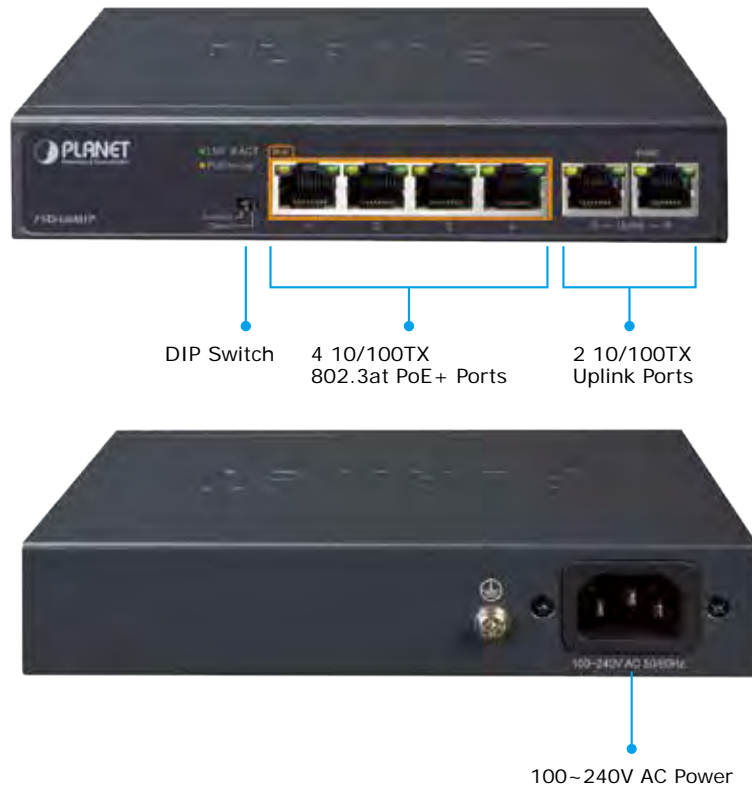
- Complies with IEEE 802.3af/at Power over Ethernet end-span
- Up to 4 IEEE 802.3af/2 IEEE 802.3at devices powered
- Supports PoE power up to 30 watts for each PoE port
- 60-watt PoE budget
- Hardware DIP switch for "Standard" and "Extend" mode selection; the "Extend" mode features 30-watt PoE transmit 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 the standard mode

## Switching

- Hardware-based 10/100Mbps auto-negotiation and auto MDI/MDI-X
- Flow control for full duplex operation and back pressure for half duplex operation
- 1536bytes packet size
- Integrates address look-up engine, supporting 2K absolute MAC addresses
- Automatic address learning and address aging
- Solid DIP switch to isolate ports to prevent broadcast storm and defend DHCP spoofing

## Hardware

- Desktop palm size
- LED indicators for PoE ready/activity and LINK/ACT
- Supports contact discharge of  $\pm 4\text{KV}$  DC and air discharge of  $\pm 6\text{KV}$  DC for Ethernet ESD protection
- Supports  $\pm 4\text{KV}$  surge immunity
- Internal AC power supply

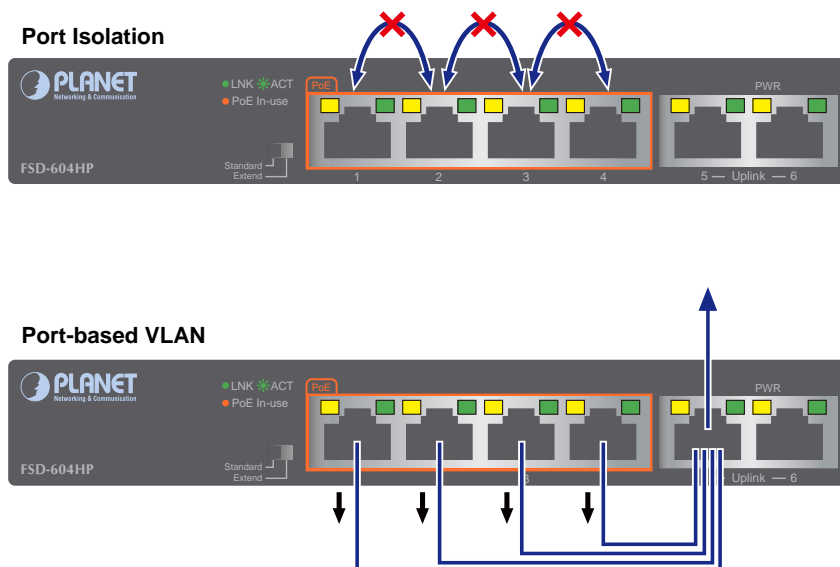


*Two 10/100Mbps Uplink Ports*

The FSD-604HP comes with two uplink ports with 100Mbps transfer rate to ensure high-speed data and video transmission, reliable assurance for connection between the surveillance system and outdoor network where the four PoE+ ports can be used to their full potential.

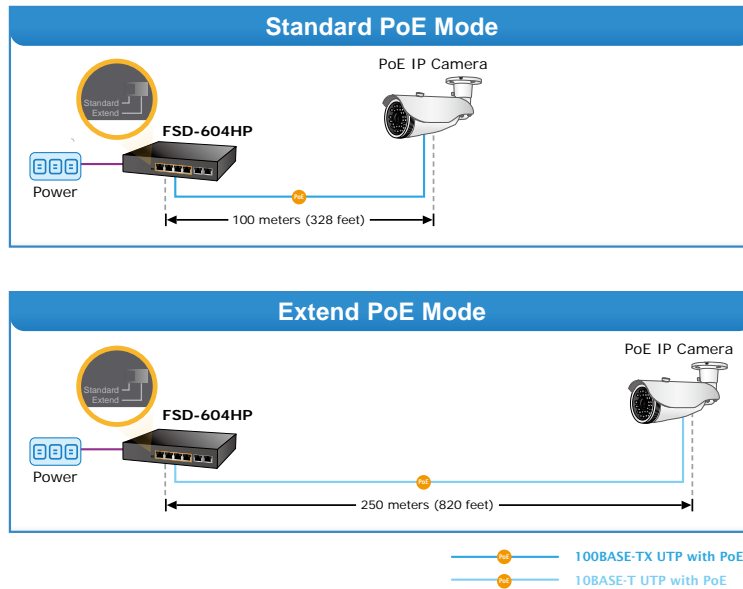
*Innovative Port-based VLAN Protection*

The FSD-604HP features “Port-based VLAN Protection” where ports can be isolated from each other via one DIP switch. This can help to prevent the IP camera’s multicast or broadcast storm from influencing each other.



*Distance Extended for Transmission of Power and Data*

The built-in solid DIP switch provides “Standard” and “Extend” operation modes. The FSD-604HP operates as a normal IEEE 802.at/af PoE Switch in the “Standard” operation mode. In the “Extend” operation mode, the FSD-604HP operates on a per-port basis in 10Mbps duplex mode 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 FSD-604HP provides an additional solution for 802.3at/af PoE distance extension, thus saving the cost of Ethernet cable installation.



*Robust Protection*

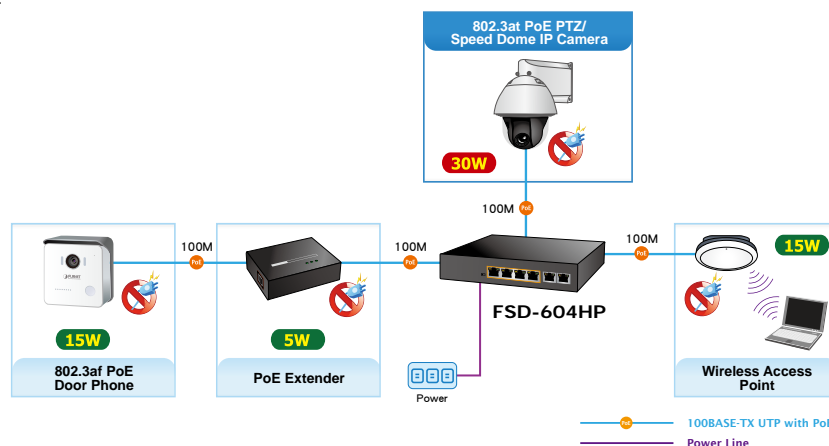
The FSD-604HP provides contact discharge of ±4KV DC and air discharge of ±6KV DC for Ethernet ESD protection. It also supports ±4KV surge immunity to improve product stability and protects users’ networks from devastating ESD attacks, making sure the flow of operation does not fluctuate.

*Environment-friendly, Fanless Design for Silent Operation*

The FSD-604HP 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 FSD-604HP 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 Cable Connection*

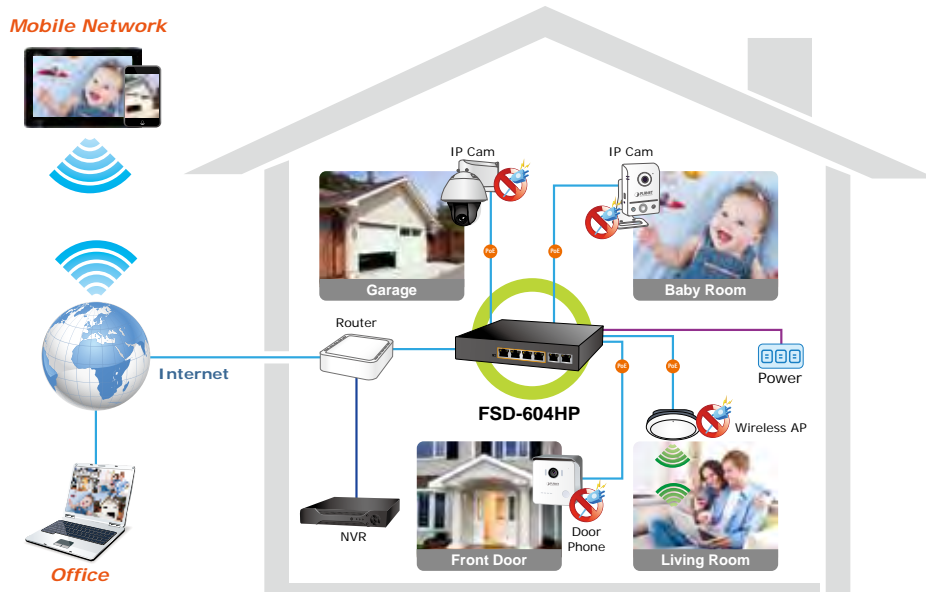
With data switching and Power over Ethernet integrated into one unit, the FSD-604HP reduces cabling requirements and eliminates the need for electrical outlets on the wall, ceiling or any unreachable place. A wire that carries both data and power can lower the installation costs, simplify the installation effort and eliminate the need for electricians or extension cords. With 4 PoE interfaces, the FSD-604HP is ideal for small businesses and workgroups making the deployment of the PoE facility including wireless access points, IP-based surveillance camera and IP phones and door phone in any places easier, more efficient and more cost-effective.



## Applications

### SOHO and Home-use Fast Ethernet PoE Network Deployment

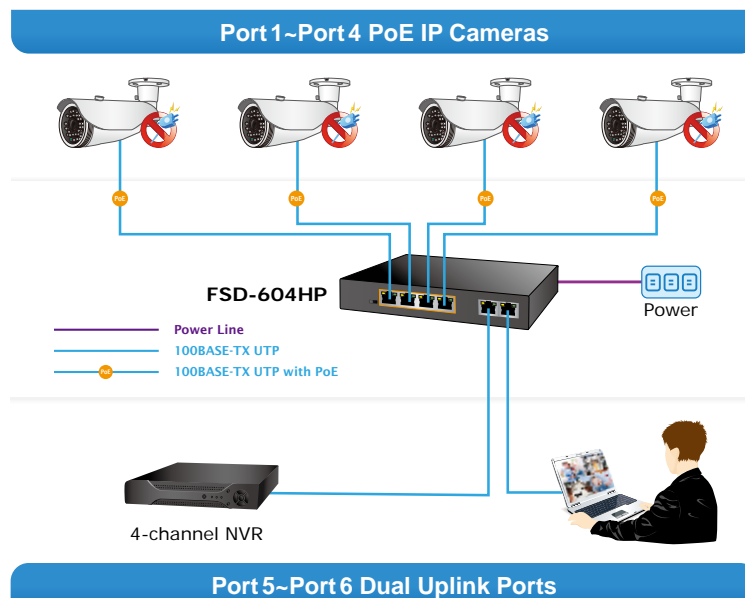
With its expanded home-use feature, the FSD-604HP 802.3at/af PoE Switch helps SOHO and home users to create an integrated data, video, and powered network. The wireless AP and PoE IP camera and PoE door phone devices work perfectly with the FSD-604HP, which injects power through the Ethernet cables, thus helping SOHO and home users to build a cost-effective and reliable PoE network environment easily.



### Perfectly-integrated Solution for PoE IP Camera and NVR System

The FSD-604HP provides four 802.3at/af PoE ports for catering to small-scale home and SOHO IP surveillance networks at a lower total cost. The FSD-604HP comes with a high-performance switch architecture and 60-watt PoE power budget. The recorded video files from the 4 PoE IP cameras powered by the FSD-604HP are saved in the 4-channel NVR system. Besides, surveillance software can be used to perform comprehensive security monitoring.

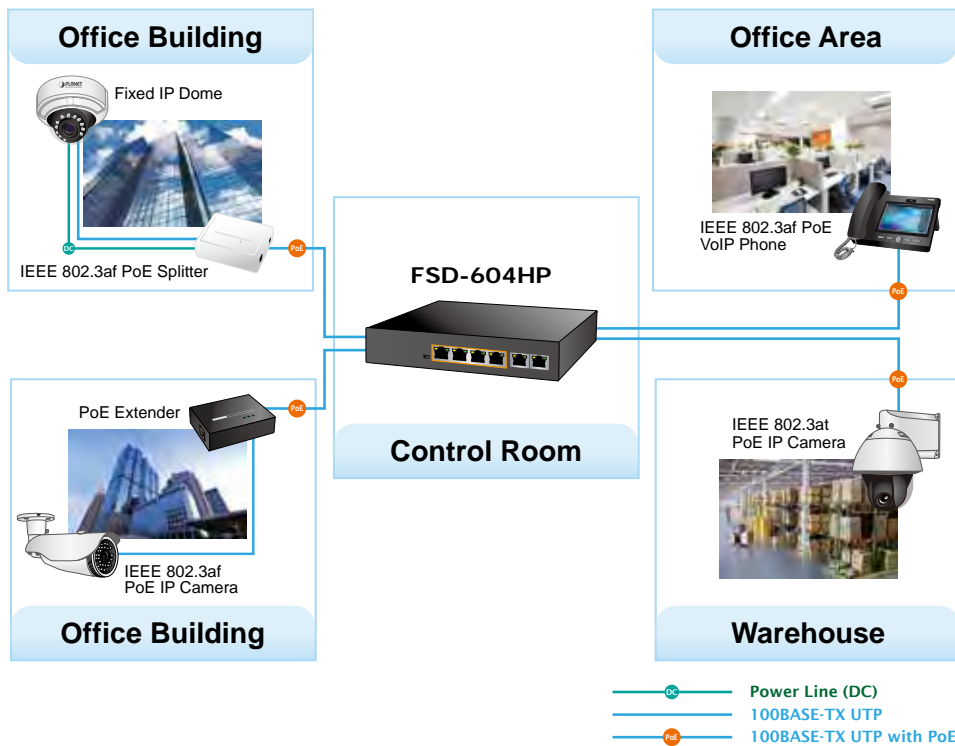
For instance, one FSD-604HP can be combined with one 4-channel NVR; that is, each of its PoE port can be linked to a specific 802.3af PoE IP camera for the administrators to centrally and efficiently manage the surveillance system in one site. The FSD-604HP's Fast Ethernet TP interface also provides Fast Ethernet TP connection for uplink to NVR systems or public server groups.



*IP Office Department/Workgroup PoE Switch*

With the business office expansion, the additional telephones required can be installed with less costs via the implementation of PoE IP telephony system than that of the traditional circuit wiring telephony system. The FSD-604HP 802.3at/af 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 FSD-604HP.

The wireless AP group, PoE IP phones and analog telephony adapter work perfectly with the FSD-604HP, which injects power through the Ethernet cables. With the FSD-604HP, 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

Model	<b>FSD-604HP</b> 4-Port 10/100Mbps 802.3af/at PoE + 2-Port 10/100Mbps Desktop Switch	
<b>Hardware Specifications</b>		
Network Connector	6-port RJ45 for 10/100BASE-TX, auto MDI/MDIX	
PoE Inject Port	4-port with 802.3af/at PoE injector function (Port-1 to Port-4)	
LED Display	<b>System:</b> Power (Orange)  <b>Per PoE port:</b> PoE (Orange, Port-1 to Port-4) LNK/ACT (Green, Port-1 to Port-6)	
DIP Switch	100m distance in standard mode 250m distance in extend mode (based on the cable category)	
Switch Architecture	Store and Forward switch architecture	
MAC Address Table	2K MAC address table with auto learning function	
Switch Fabric	1.2Gbps	
Switch Throughput	0.89Mpps @64bytes	
Maximum Packet Size	1536bytes	
Flow Control	Back pressure for half duplex. IEEE 802.3x pause frame for full duplex	
Power Requirements	AC 100~240V, 2A max.	
Power Consumption	Max. 63 watts, 214 BTU	
Dimensions (W x D x H)	168 x 93 x 32 mm	
Weight	499g	
ESD Protection	Contact discharge of ±4KV DC Air discharge of ±6KV DC	
Surge Immunity	±4KV	
<b>Power over Ethernet</b>		
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 52V DC, 300mA. max. 15.4 watts (IEEE 802.3af) Per Port 52V DC, 600mA. max. 30 watts (IEEE 802.3at)	
PoE Power Budget	60 watts	
Number of PDs, 7 watts	4	
Number of PDs, 15.4 watts	4	
Number of PDs, 30 watts	2	
<b>Standard Conformance</b>		
EMI Safety	CE, FCC	
Standard Compliance	IEEE 802.3	Ethernet
	IEEE 802.3u	Fast Ethernet
	IEEE 802.3x	Flow Control
	IEEE 802.3af	Power over Ethernet
	IEEE 802.3at	Power over Ethernet Plus
<b>Environment</b>		
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	

## Ordering Information

FSD-604HP	4-Port 10/100Mbps 802.3at/af PoE + 2-Port 10/100Mbps Desktop Switch
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## Related PoE Products

HDP-1100PT	720p SIP Door Phone with PoE
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-2250VT	Industrial PoE Plus Outdoor IR IP Camera
ICA-3250	1080p IR Bullet PoE IP Camera
ICA-3250V	Full HD Outdoor IR PoE IP Camera
ICA-4200V	Full HD 20M IR Vari-focal Dome IP Camera
ICA-4250	1080p IR Dome PoE IP Camera
ICA-E3550V	5 Mega-pixel Bullet IR PoE IP Camera with Extended Support
ICA-E5550V	5 Mega-pixel Vandalproof IR PoE IP Camera with Extended Support
ICA-E6260	2 Mega-pixel PoE Plus Speed Dome IP Camera with Extended Support
ICA-E8550	5 Mega-pixel Outdoor IR PoE Fisheye IP Camera with Extended Support
ICA-M3380P	H.265 3 Mega-pixel Bullet IR IP Camera with Remote Focus and Zoom
ICA-M4320P	H.265 3 Mega-pixel IR IP Camera with Remote Focus and Zoom
ICA-M5380P	H.265 3 Mega-pixel Vandalproof IR IP Camera with Remote Focus and Zoom
ICF-1800	HD Touch Screen Android Multimedia Conferencing Phone
POE-162S	IEEE 802.3at Gigabit High Power over Ethernet Splitter
POE-E201	IEEE 802.3at Power over Gigabit Ethernet Extender
WDAP-C7200AC	1200Mbps 802.11ac Dual Band Ceiling-mount Wireless Access Point
VIP-1120PT	High Definition Color PoE IP Phone
VIP-2140PT	High Definition Color PoE IP Phone with Dual Display
VIP-5060PT	Professional HD PoE IP Phone (6-Line)
VIP-6040PT	Gigabit Color LCD HD PoE IP Phone (4-Line)
GSD-604HP	4-Port 10/100/1000T 802.3at PoE + 2-Port 10/100/1000T Desktop Switch (External 55 Watts)