

4-Port 10/100Mbps 802.3at/af PoE + 1-Port 10/100Mbps Desktop Switch



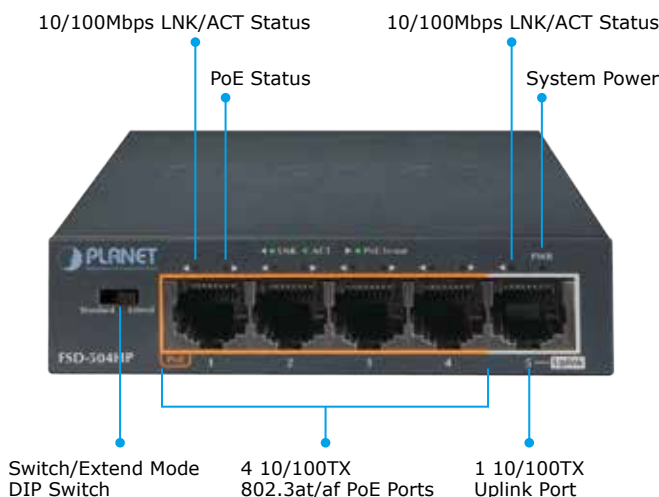
Easy Deployment for SOHO and Home Users

PLANET FSD-504HP, a **4-port 10/100Mbps 802.3at/af Power over Ethernet + 1-port Fast Ethernet Switch**, can be easily and quickly deployed for SOHO and home-use PoE application environment by any users as it is compact in size and simple to install. The FSD-504HP is definitely an ideal solution for SOHO and home users as it has the following advanced features:

- 4-port PoE, 60-watt PoE budget
- One 10/100Mbps uplink port
- 250m distance w/30W power output at speed of 10Mbps in the Extend Mode.
- Desktop palm-size design

Centralized Power Distribution for Small Ethernet Networking

The FSD-504HP has a total PoE budget of **60 watts**, which is an ideal solution to meeting the demand for sufficient PoE power for network applications. The four 802.3at/af PoE ports provide PoE power injector function which is able to drive two IEEE 802.3at compliant powered devices or four IEEE 802.3af compliant powered devices. The FSD-504HP also provides a simple, cost-effective and non-blocking wire-speed performance. It comes with a palm-size metal housing, suitable for the desktop deployment of SOHO or home-use network environment.



RJ45 Interface

- Five 10/100Mbps Fast Ethernet ports
- 4 ports support 51V DC power to PoE powered device

Power over Ethernet

- Complies with IEEE 802.3af/at Power over Ethernet end-span + mid-span PSE
- 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 support
- Integrates address look-up engine, supporting 1K 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
- One 51V DC power jack

Ideal Solution for Securing SOHO IP Surveillance Infrastructure

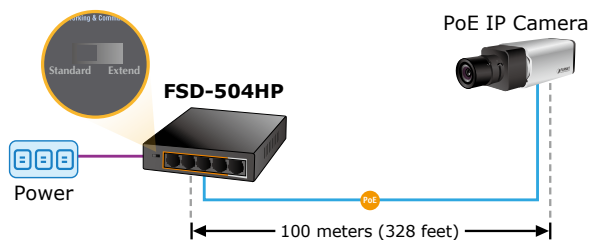
Targeting the growing popular IP surveillance applications, the FSD-504HP 802.3at/af PoE Switch is also positioned as a Surveillance Switch **for quick and easy PoE IP camera deployment with power feeding**. The FSD-504HP supports both 802.3at and 802.3af PoE standards along with four 10/100BASE-TX ports featuring up to 30 watts per RJ45 copper interface, and one extra Fast Ethernet TP interface supporting high-speed transmission of surveillance images and videos.



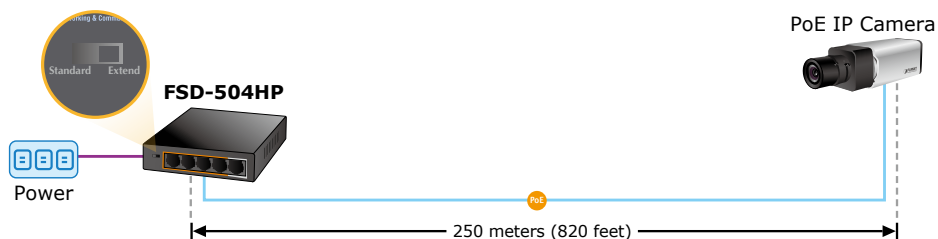
802.3at/af PoE Power and Ethernet Data Transmit Distance Extension

The built-in solid DIP switch provides “**Standard**” and “**Extend**” operation modes. The FSD-504HP operates as a normal IEEE 802.at/af PoE Switch in the “**Standard**” operation mode. In the “**Extend**” operation mode, the FSD-504HP 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 FSD-504HP provides an additional solution for 802.3at/af PoE distance extension, thus saving the cost of Ethernet cable installation. Its VLAN isolation function isolates ports so as to prevent broadcast storm and defend DHCP spoofing in the “**Extend**” operation mode.

Default PoE Mode



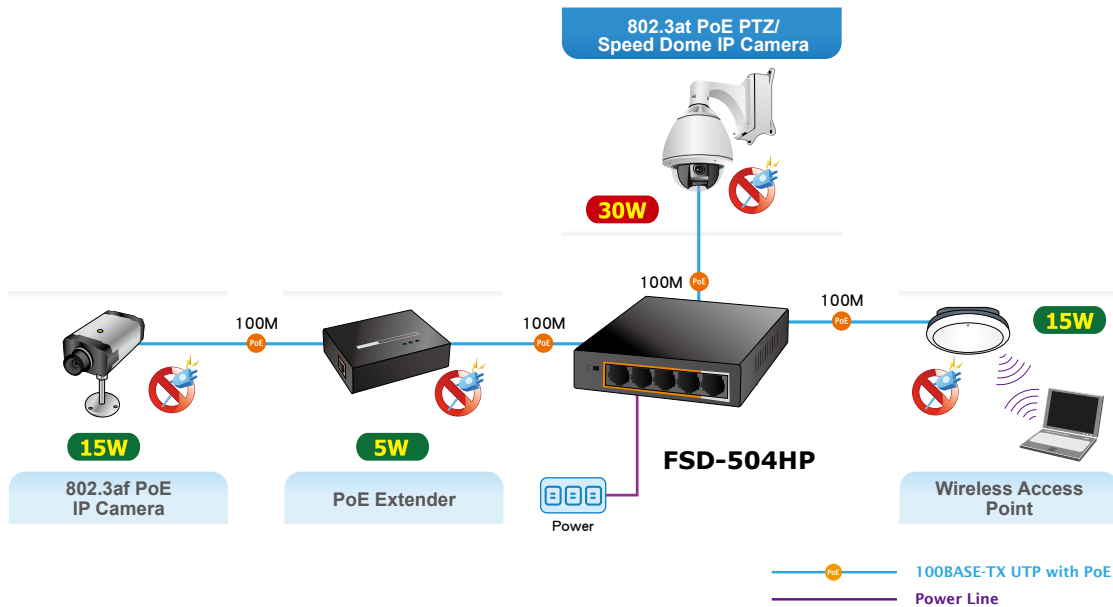
Extend PoE Mode



-  100BASE-TX UTP with PoE
-  10BASE-T UTP with PoE

Easy Cable Connection

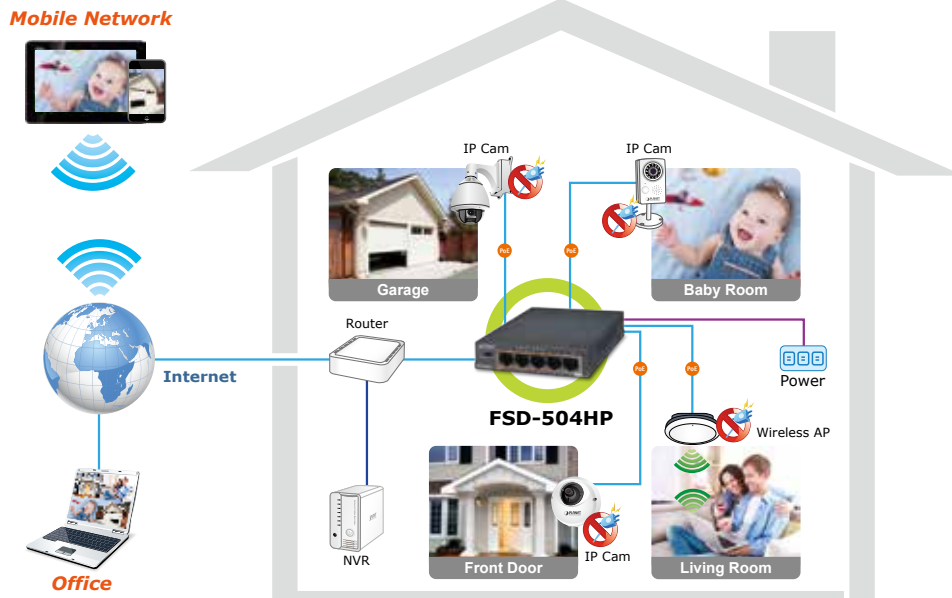
With data switching and power over Ethernet integrated into one unit, the FSD-504HP reduces cabling requirements and eliminates the need for electrical outlets on the wall, ceiling or any unreachable place. A wire that carries both data and power can lower the installation costs, simplify the installation effort and eliminate the need for electricians or extension cords. With 4 PoE interfaces, the FSD-504HP 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 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-504HP 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 devices work perfectly with the FSD-504HP, which injects power through the Ethernet cables, thus helping SOHO and home users to build a cost-effective and reliable PoE network environment easily.

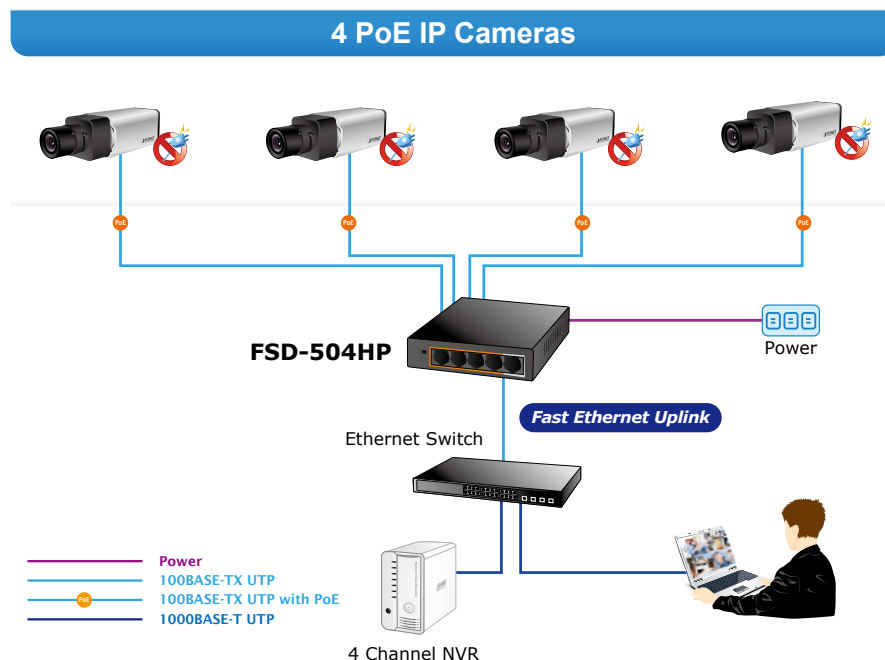


Perfectly-integrated Solution for PoE IP Camera and NVR System

The FSD-504HP 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-504HP comes with a high-performance switch architecture and 60-watt PoE power budget. The recorded video files from the 4 PoE IP cameras can be powered by the FSD-504HP and saved in the 4-channel NVR system. Besides, surveillance software can be used to perform comprehensive security monitoring.

For instance, one FSD-504HP 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-504HP's Fast Ethernet TP interface also provides Fast Ethernet TP connection for uplink to NVR systems or public server groups.

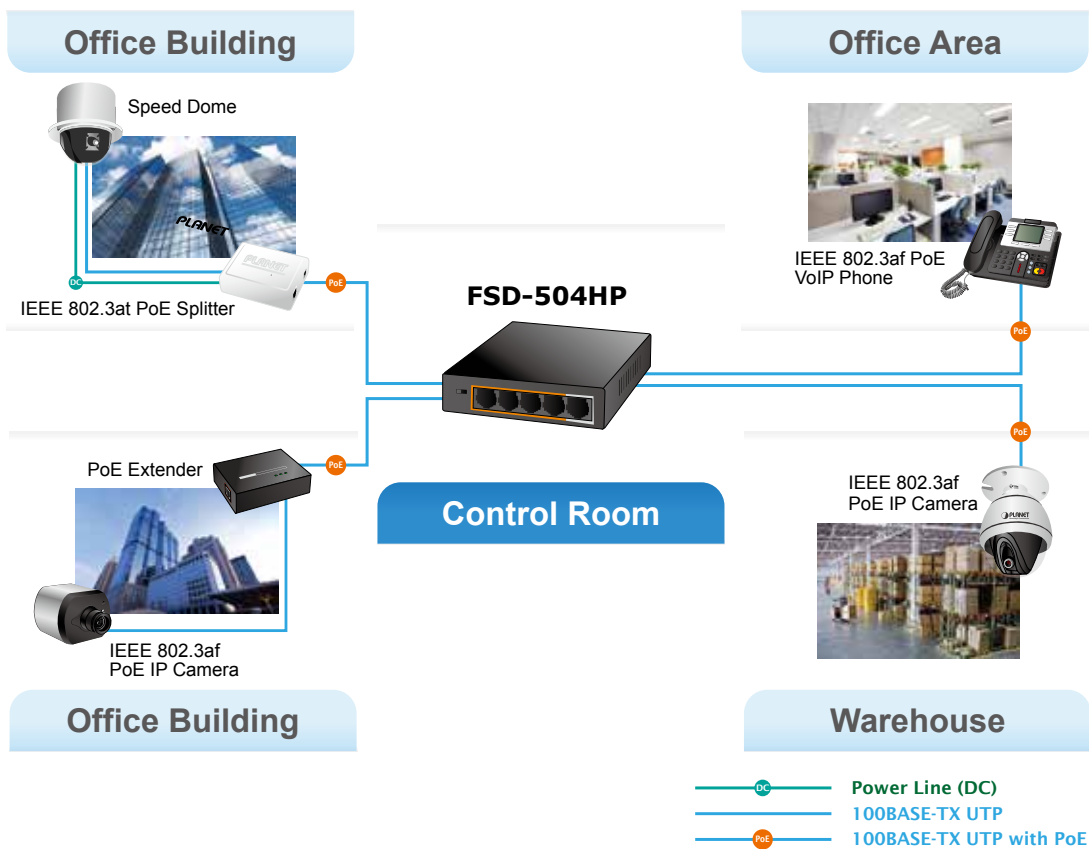
Perfect Combination 4-Port PoE Switch + 4-Ch NVR



IP Office Department/Workgroup PoE Switch

With the business office expansion, the additional telephones required can be installed in less cost via the implementation of PoE IP telephony system than that of the traditional circuit wiring telephony system. The FSD-504HP 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 the need of an additional power cable because the power can be provided via the standard Ethernet cable from the connected FSD-504HP.

The wireless AP group, PoE IP phones and analog telephony adapter work perfectly with the FSD-504HP, which injects power through the Ethernet cables. With the FSD-504HP, IP telephony deployment becomes more reliable and cost effective, thus helping enterprises save tremendous cost when upgrading from the traditional telephony system to IP telephony communications infrastructure.



Specifications

Model	FSD-504HP	
Hardware Specifications		
Hardware Version	2	
Network Connector	5-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	System: Power (green) Per PoE port: PoE (green, Port 1 to Port 4) LNK/ACT (green, Port 1 to Port 5)	
Switch Architecture	Store and Forward switch architecture	
MAC Address Table	1K MAC address table with auto learning function	
Switch Fabric	1Gbps	
Switch Throughput	0.74Mpps @64bytes	
Maximum Packet Size	1536bytes	
Flow Control	Back pressure for half-duplex; IEEE 802.3x pause frame for full-duplex	
Power Requirements	51V DC, 1.25A.	
Power Consumption	Max. 63 watts, 214 BTU	
Dimensions (W x D x H)	100 x 100 x 26mm	
Weight	257g	
Power 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 + mid-span	
Power Pin Assignment	1/2 (+), 4/5(+), 3/6(-), 7/8(-)	
PoE Power Output	Per port 51V DC, 300mA. max. 15.4 watts (IEEE 802.3af) Per port 51V 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	
Standard Conformance		
EMI Safety	FCC Class A, CE	
Standard Compliance	IEEE 802.3 IEEE 802.3u IEEE 802.3x IEEE 802.3af IEEE 802.3at	Ethernet Fast Ethernet Flow Control Power over Ethernet Power over Ethernet Plus
Environment		
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-504HP	4-Port 10/100Mbps 802.3at/af PoE + 1-Port 10/100Mbps Desktop Switch
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Related PoE Products

ICA-2200	Full HD PoE Box IP Camera
ICA-2250VT	Industrial PoE Plus Outdoor IR IP Camera
ICA-2500	5 Mega-pixel PoE Box IP Camera
ICA-3250V	Full HD Outdoor IR PoE IP Camera
ICA-4200V	Full HD 20M IR Vari-focal Dome IP Camera
ICA-4500V	5 Mega-pixel 20M IR Vari-focal Dome IP Camera
ICA-5250	Full HD Ultra-mini Vandal Dome
ICA-5350V	3 Mega-pixel Vandalproof IR IP Camera
ICA-HM127	3 Mega-pixel H.264 Box IP Camera
ICA-HM132	H.264 2 Mega-pixel 20M IR Vari-focal Dome IP Camera
ICA-HM136	H.264 2 Mega-pixel 20M IR Vandalproof Dome IP Camera
ICA-HM351	2 Mega-pixel 35M IR Outdoor Box PoE IP Camera
ICA-HM620	2 Mega-pixel PoE Plus Speed Dome Internet Camera
POE-162S	IEEE 802.3at Gigabit High Power over Ethernet Splitter
POE-E201	IEEE 802.3at Power over Ethernet Extender
WNAP-C3220	802.11n Wireless Ceiling-mount PoE Access Point
WNAP-W2200	802.11n 300Mbps In-Wall Access Point w/USB Charger (EU Type)
WDAP-C7400	900Mbps Dual Band Ceiling-mount Wireless Access Point
WDAP-C7200AC	1200Mbps 802.11ac Dual Band Ceiling-mount Wireless Access Point
VIP-256PT	802.3af PoE SIP IP Phone
VIP-2020PT	Enterprise HD PoE IP Phone (2-Line)
VIP-5060PT	Professional HD PoE IP Phone (6-Line)