

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



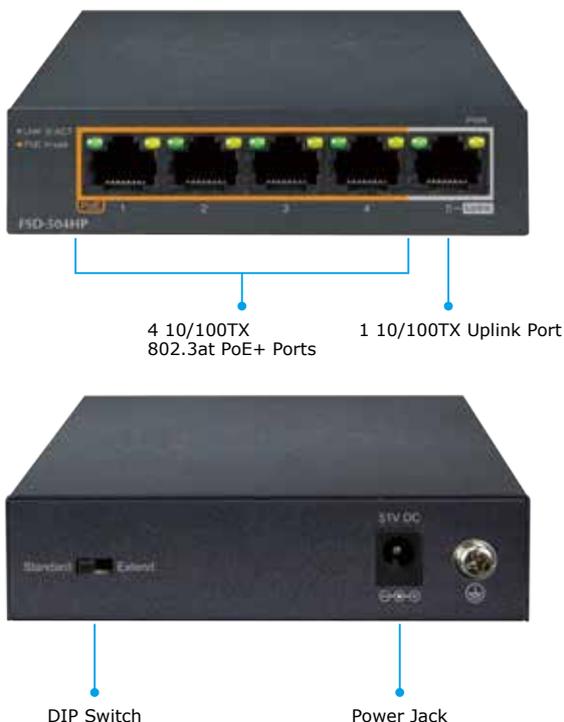
### Easy Deployment for SOHO and Home Users

PLANET FSD-504HP, a **4-port 10/100Mbps 802.3af/at 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
- Can extend distance of up to 250m in the extend mode
- 30-watt power output at speed of 10Mbps
- 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 802.3af/at 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

- 5 10/100Mbps Fast Ethernet ports
- 4 ports supporting 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
- 6KV lightning protection
- One 51V DC power jack

*Ideal Solution for Securing SOHO IP Surveillance Infrastructure*

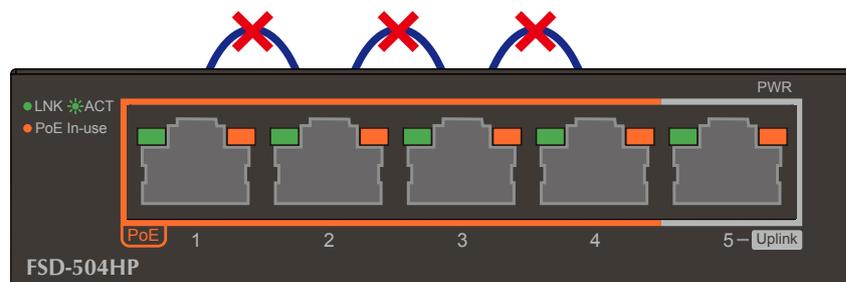
Targeting the increasingly popular IP surveillance applications, the FSD-504HP 802.3af/at PoE Switch is also positioned as a Surveillance Switch for quick and easy PoE IP camera deployment with power feeding. The FSD-504HP supports both 802.3at and 802.3af PoE standards along with four 10/100BASE-TX 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.



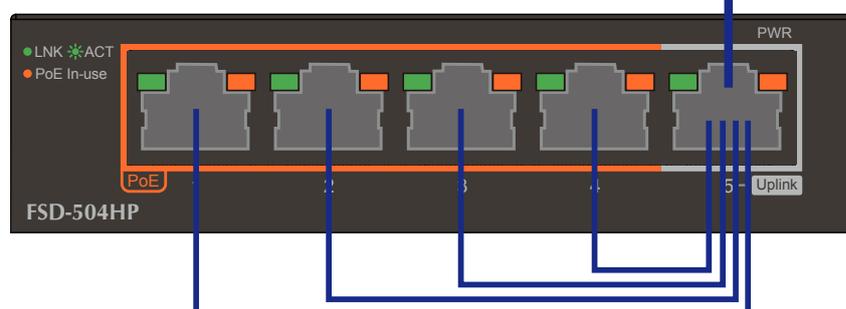
*Innovative Port-based VLAN Protection features*

The FSD-504HP features "Port-based VLAN Protection" whose 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.

**Port Isolation**

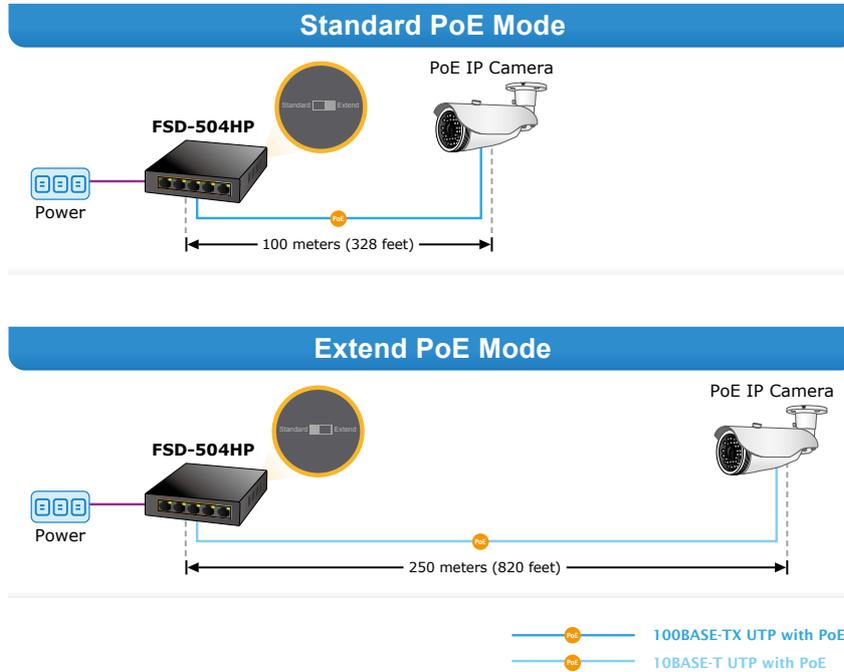


**Port-based VLAN**



**802.3af/at 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.af/at 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 802.3af/at PoE distance extension, thus saving the cost of Ethernet cable installation.



**Guaranteed Protection for a Smooth Operation**

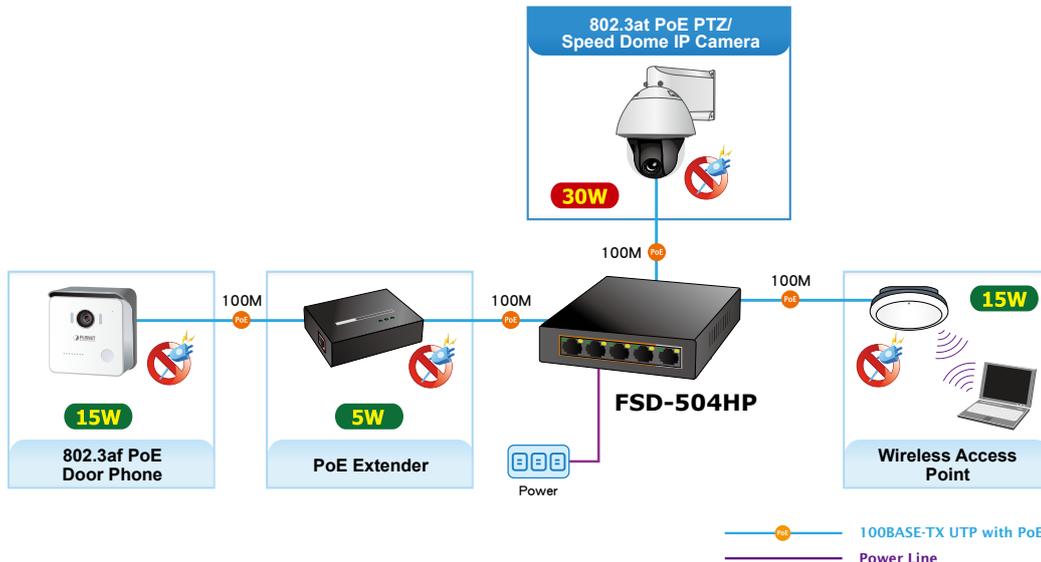
The FSD-504HP protects against the ESD 6KV surge to improve product stability and also protects users’ networks from devastating ESD attacks, making sure the flow of operation does not fluctuate.

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

The FSD-504HP 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-504HP 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**

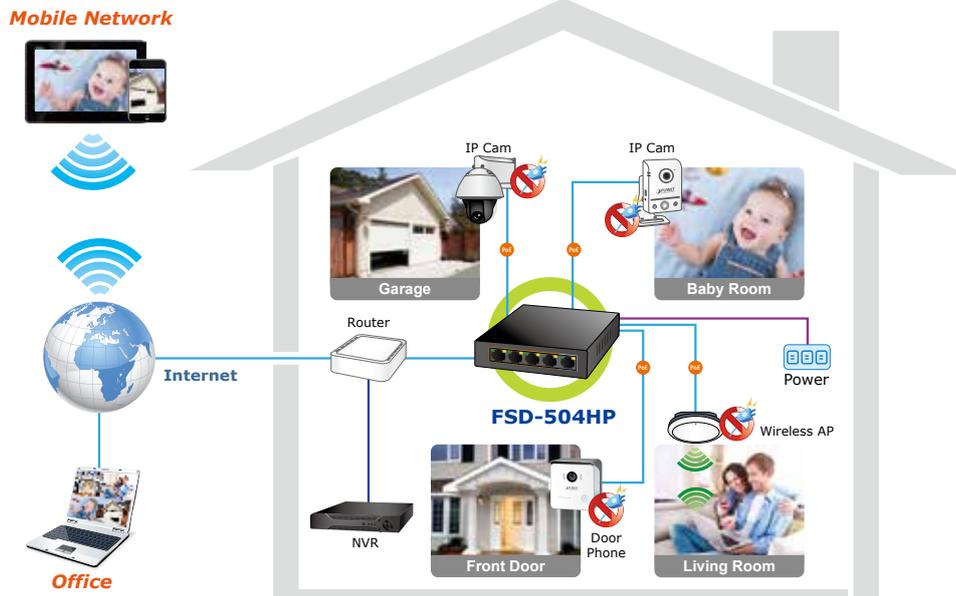
With data switching and Power over Ethernet integrated into one unit, the FSD-504HP reduces cabling requirements and eliminates the need for electrical outlets on the wall, ceiling or any unreachable place. A wire that carries both data and power can lower the installation costs, simplify the installation 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 802.3af/at 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-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.

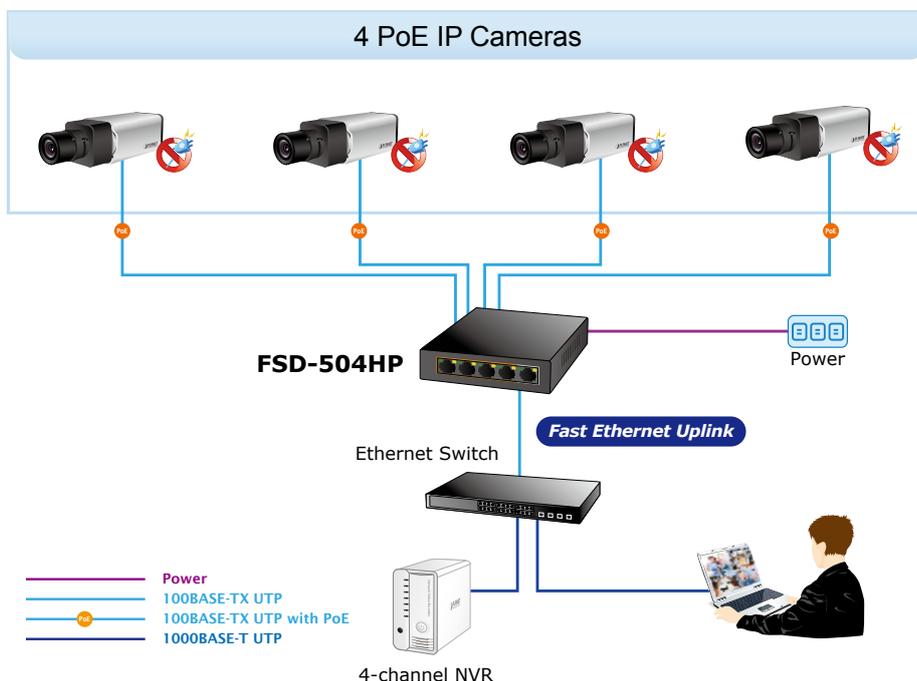


### Perfectly-integrated Solution for PoE IP Camera and NVR System

The FSD-504HP provides four 802.3af/at 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.

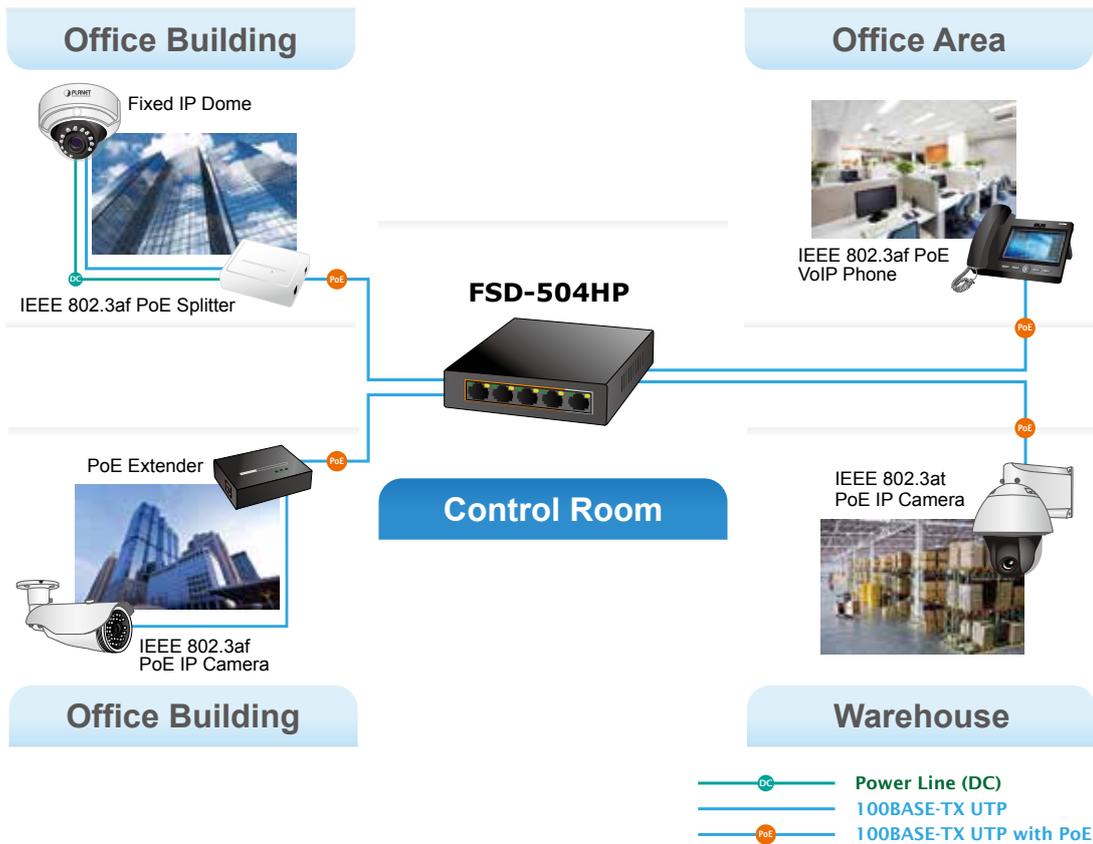
### Perfect Combination of 4-port PoE Switch + 4-ch NVR



*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 802.3af/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 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	
<b>Hardware Specifications</b>		
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	<b>System:</b> Power ( <b>Orange</b> ) <b>Per PoE port:</b> PoE ( <b>Orange</b> , Port 1 to Port 4) LNK/ACT ( <b>Green</b> , Port 1 to Port 5)	
DIP Switch	Standard mode for 100M Extend mode for 250m (Based on the cable category)	
Switch Architecture	Store and Forward switch architecture	
MAC Address Table	1K MAC address table with auto learning function	
EST Protection	6KV	
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 26 mm	
Weight	257g	
<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 + 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	
<b>Standard Conformance</b>		
EMI Safety	FCC, 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
<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-504HP	4-Port 10/100Mbps 802.3af/at PoE + 1-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-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 Ethernet Extender
WNAP-C3220	802.11n Wireless Ceiling-mount PoE Access Point
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)