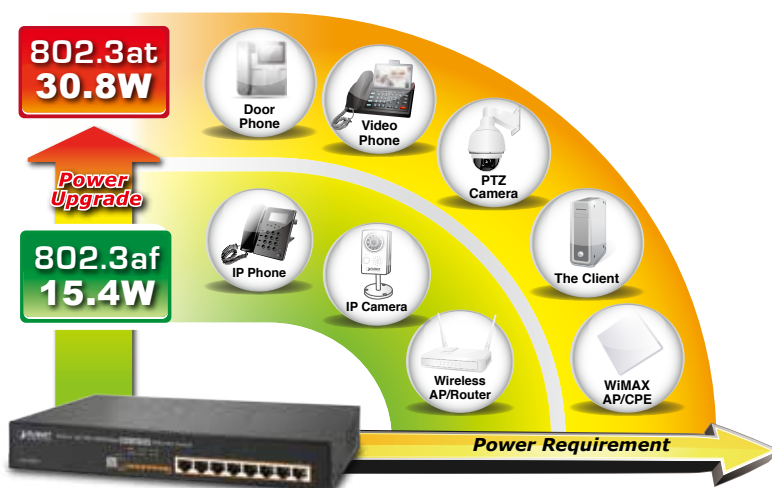# 8-Port 10/100/1000T 802.3at PoE Desktop Switch

High Power PoE for Security and Public Service Applications

To fulfill the demand of High Power PoE for network applications with Gigabit transmission, each Gigabit port of PLANET GSD-808HP Switch features IEEE 802.3af and IEEE 802.3at High Power PoE capabilities that combine up to 130 watts of power output and data per port over one Cat.5E / 6 Ethernet cable. With a total PoE budget of 130 watts, the GSD-808HP is designed specifically to satisfy the growing demand of higher power consuming network PDs (powered devices) such as PTZ (Pan, Tilt & Zoom) / Speed Dome network cameras, multi-channel (802.11a/b/g/n) wireless LAN access points and other network devices by providing PoE power that doubles the capacity of that of the conventional 802.3af PoE.

Physical Port

- 8 10/100/1000BASE-T Gigabit Ethernet RJ45 ports with IEEE 802.3at PoE+ Injector

Power over Ethernet

- Complies with IEEE 802.3at Power over Ethernet Plus/end-span PSE
- Up to 8 IEEE 802.3af/802.3at devices powered
- Supports PoE power up to 30 watts for each PoE port
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- PoE usage alarm LED
- Remote power feeding up to 100m

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 4K absolute MAC addresses
- 9K jumbo frame supports all speeds (10/100/1000Mbps)
- Automatic address learning and address aging
- Supports pre-Energy-Efficient Ethernet (EEE) function (IEEE 802.3az)

Case and Installation

- 12-inch desktop size, 1U height
- LED indicators for PoE ready, PoE activity and PoE usage alarm
- Fanless design
- Rack-mountable, Plug-and-Play installation
- Ethernet Link Energy-saving technology
  - Link down power saving
  - Intelligent scales power based on cable length

Automatic PoE Management

To facilitate power management, the GSD-808HP implements the following powerful PoE intelligent features:

- PoE Power Usage Threshold Alarm
- PoE Power Budget Control

The GSD-808HP helps users to manage PoE power usage easily and efficiently by its intelligent PoE features and LED indications; there are two orange LEDs named "PoE Power Usage" located on the left side of the GSD-808HP front panel, of which, one LED indicates the total PoE power output of Ports 1-4 and the other LED shows the total PoE power output of Ports 5-8. When the PoE output of Ports 1-4 or 5-8 is over 80%, the LED will light up to notify customers for better PoE allocation. If the power output is over 95%, the LED will blink to warn customers.

Energy Saving

The GSD-808HP uses a new engine that incorporates the advanced Green Networking technologies:

- Idle Mode Link Down power saving
- Intelligent Scales Power based on cable length

The Idle mode Link Down power saving of the GSD-808HP complies with IEEE 802.3az Energy Efficient Ethernet (EEE) standard to automatically lower power for a given port when it is not linked.

Easy Installation and Cable Connection

The GSD-808HP does not need any extended cables and dedicated electrical outlets on the wall, ceiling or any unreachable place, thus lowering the installation costs and simplifying the installation effort.
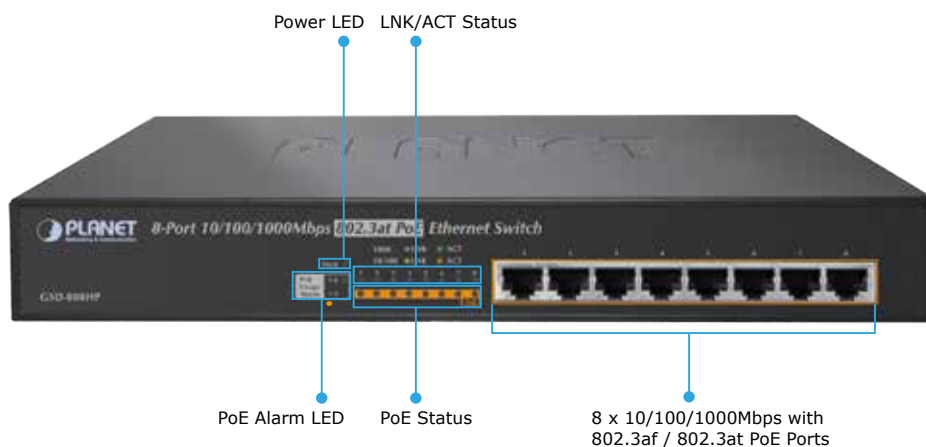

All the RJ45 interfaces of the GSD-808HP support 10/100/1000Mbps auto-negotiation for optimal speed detection through RJ45 Category 6, 5 or 5e cables. It also supports standard auto-MDI/MDI-X that can detect the type of connection to any Ethernet device without requiring special straight or crossover cables.
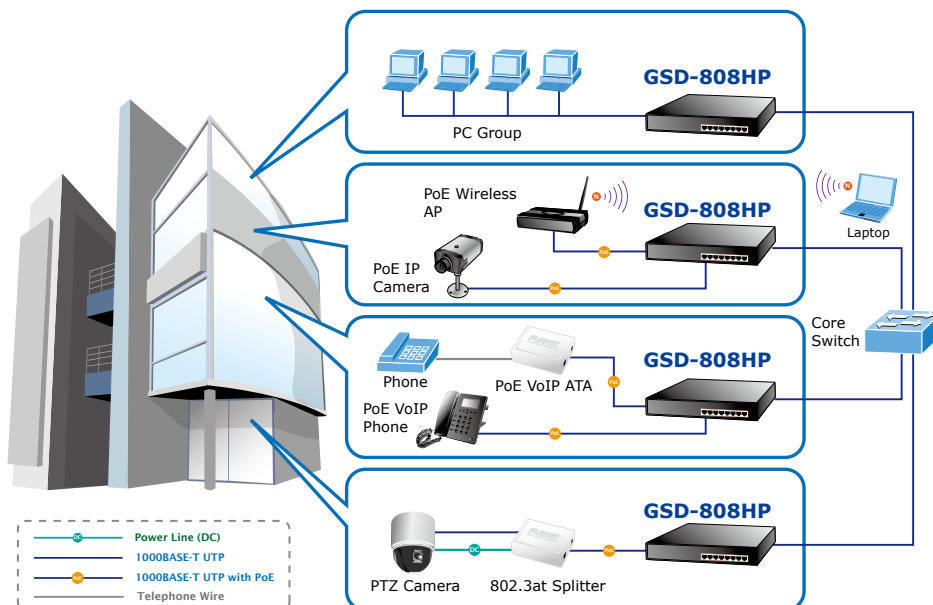
Applications

High Power IP Surveillance and Wireless LAN Service in Public Transportation

Having the capability of IEEE 802.3at Power over Ethernet standard, the GSD-808HP can directly connect with any IEEE 802.3at end-nodes like PTZ (Pan, Tilt & Zoom) network cameras, PTZ speed dome cameras, color touch-screen voice over IP (VoIP) telephones, and multi-channel wireless LAN access points. Besides the wired Internet network, the wireless LAN would be more efficient for the transportation station to provide high-speed and wide area Internet services for travelers. By adopting PoE wireless LAN structure, the transportation authority gains benefits from less cost while providing better Internet services in wider areas for the travelers.
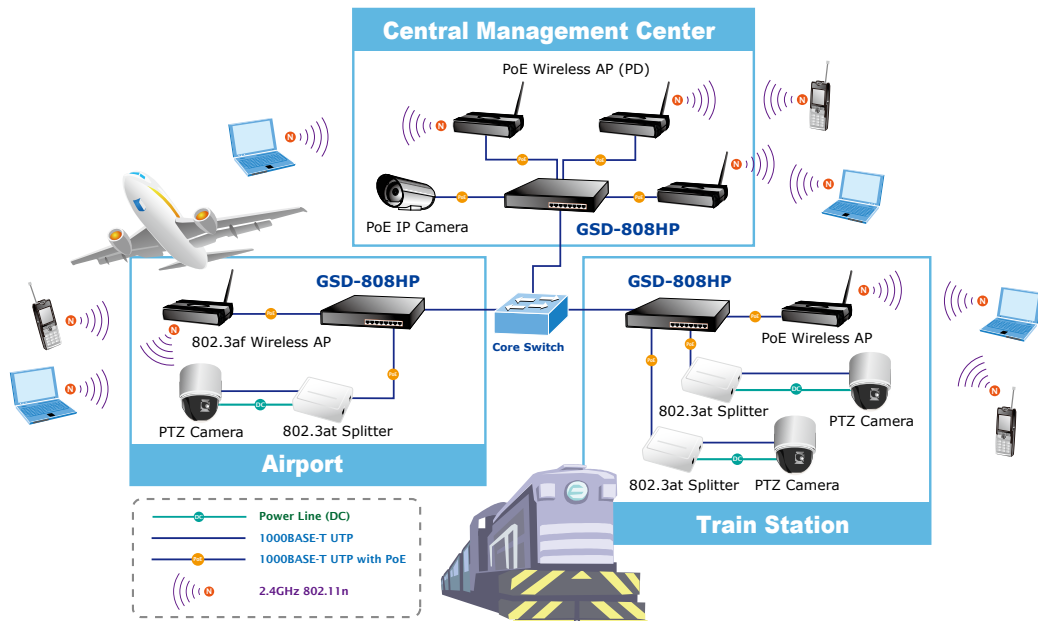
Flexible VoIP Deployment in IP Office

With the business office expansion, the additional telephones required can be installed at less cost via the implementation of PoE IP telephony system, when compared with that of the traditional circuit wiring telephony system. PLANET GSD-808HP 802.3at Desktop PoE Switch helps enterprises to create an integrated data, voice, and powered network. PLANET 802.3af compliant IP phones and analog telephony adapter can be installed without an additional power cable because the power can be provided via the standard Ethernet cable from the connected GSD-808HP. With the GSD-808HP, 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	GSD-808HP
Hardware Specifications	
Copper Ports	8 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports
PoE Inject Port	8 ports with 802.3at/af PoE injector function with Port-1 to Port-8
LED Indicators	System: Power(Green) PoE Usage Alarm: 　1-4 (Orange) 　5-8 (Orange) Port 1 to Port 8 　1000 LNK/ACT (Green) 　10/100 LNK/ACT (Orange) PoE-in-Use (Orange)
Switch Architecture	Store-and-Forward
Address Table	4K entries, automatic source address learning and aging
Switch Fabric	16Gbps/non-blocking
Throughput (packet per second)	11.9Mpps@64bytes
Jumbo Frames	9Kbytes
Power Requirements	AC 100~240V, 50/60Hz, 2A max.
Power Consumption	Max. 150 watts/511 BTU
Dimensions (W x D x H)	280 x 180 x 44 mm
Weight	1670g
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
PoE Power Output	Per port 52V DC max. 30.8 watts
Power Pin Assignment	1/2(+), 3/6(-)
PoE Power Budget	130 watts
Max. Number of Class 2 PDs	8
Max. Number of Class 3 PDs	8
Max. Number of Class 4 PDs	4
Standards Conformance	
Regulatory Compliance	FCC Part 15 Class B, CE
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX/100BASE-FX IEEE 802.3ab Gigabit 1000T IEEE 802.3x flow control and back pressure IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus IEEE 802.3az Energy-Efficient Ethernet
Environment	
Operating Temperature	0 ~ 50 degrees C
Storage Temperature	0 ~ 50 degrees C
Humidity	5 ~ 95% (non-condensing)

Ordering Information

GSD-808HP	8-Port 10/100/1000Mbps 802.3at PoE Desktop Switch

Related Products

GSD-908HP	8-Port 10/100/1000T 802.3at PoE + 1-Port Gigabit Desktop Switch
GSD-1002VHP	8-Port 10/100/1000T 802.3at PoE + 2-Port 10/100/1000T Desktop Switch with LCD PoE Monitor (120 Watts)
GSW-1600HP	16-Port 10/100/1000Mbps 802.3at PoE+ Ethernet Switch
GSD-604HP	4-Port 10/100/1000T 802.3at PoE + 2-Port 10/100/1000T Desktop Switch (External 55 Watts)
GSD-804P	8-Port 10/100/1000Mbps with 4-Port 802.3at PoE+ Ethernet Switch

GSD-808HPv5