

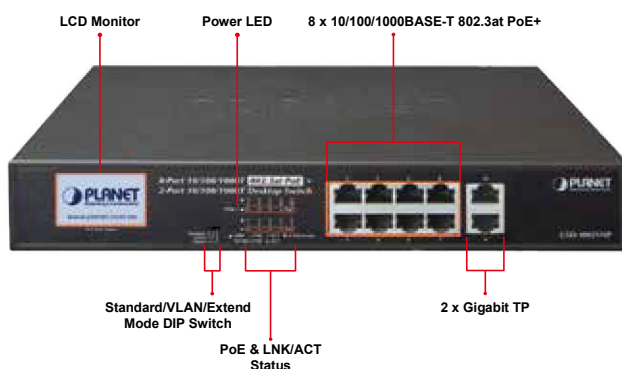
# 8-Port 10/100/1000T 802.3at PoE + 2-Port 10/100/1000T Desktop Switch with LCD PoE Monitor (120W)



## *Ideal, High-performance Integration Solution for Secure IP Surveillance Infrastructure*

PLANET GSD-1002VHP is an ideal Plug and Watch Power over Ethernet solution which provides quick installation, real-time PoE work status monitoring and immediate troubleshooting through its unique LCD display to improve work efficiency and quality without any PC or software required.

The GSD-1002VHP is equipped with 8 10/100/1000BASE-T ports featuring 30-watt 802.3at Power over Ethernet Plus (PoE+) copper interfaces and 2 extra 10/100/1000BASE-T uplink ports with inner power system. With a total PoE power budget of up to 120 watts and non-blocking data switching performance, the GSD-1002VHP fulfills the demand of sufficient PoE power for HD IP surveillance. It offers a desktop-sized, reliable and visible power solution for small businesses and system integrators deploying Power over Ethernet networks.



## *LCD Monitor for Real-time PoE Usage and System Status Display*

The LCD monitor of the GSD-1002VHP clearly shows the PoE loading of each port, total PoE power usage and system status, such as overload, low voltage, over voltage and high temperature. With its brand-new LCD monitor, user is able to obtain detailed information about real-time PoE working condition of the GSD-1002VHP directly. Also the Power Budget Control function helps to prevent power budget overloading.

### Physical Port

- 10-port 10/100/1000BASE-T Gigabit Ethernet RJ45 copper

### Power over Ethernet

- Complies with IEEE 802.3af/at Power over Ethernet end-span PSE
- Up to 8 ports of IEEE 802.3af/802.3at devices powered
- Supports PoE Power up to 30.8 watts for each PoE port
- Each port supports 52V DC power to PoE Powered Device
- 120-watt PoE budget
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100m with standard mode, 250m with extended 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
- IEEE 802.1Q VLAN transparency
- 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
- Solid DIP switch to isolate ports to prevent broadcast storm and defend DHCP spoofing

### Hardware

- 12-inch desktop size, 1U height, rack mountable
- LED indicators for system power, per port PoE ready and PoE activity, speed, Link/Act
- LCD monitor for system status and PoE usage status display
- 1 silent fan to provide stable and efficient power performance
- Support Energy-Efficient Ethernet (EEE) function (IEEE 802.3az)

**PoE Port Status**

PoE Port Status	
P01: 11.2W	P05: 11.0W
P02: 29.2W	P06: ----
P03: ULP	P07: 18.8W
P04: OLP	P08: SCP
PB: 120W	Total: 63W

**Power Over-voltage Protection**

```

WARNING!
-----
Main supply voltage
is high!
All ports are shut
down.
    
```

**Power Low-voltage Protection**

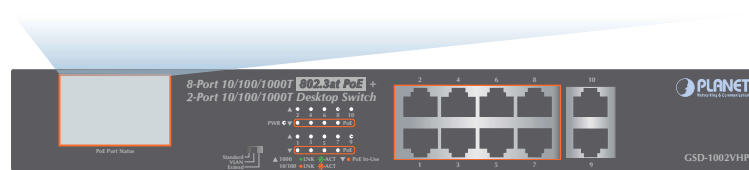
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WARNING!
-----
Main supply voltage
is low!
All ports are shut
down.
    
```

**Power Over Temperature Protection**

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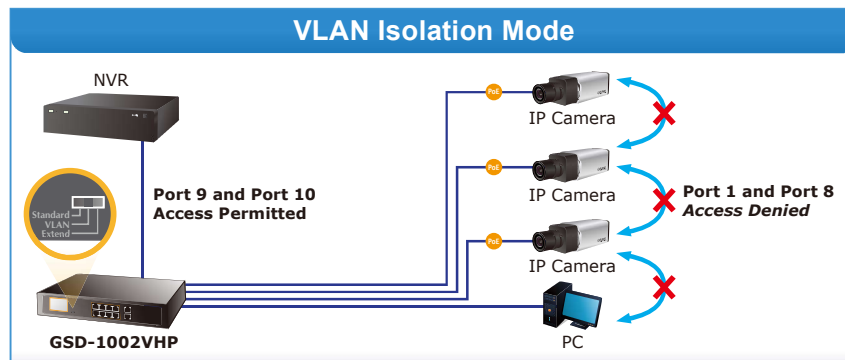
WARNING!
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The PSE device is too
hot!
All ports are shut
down.
    
```



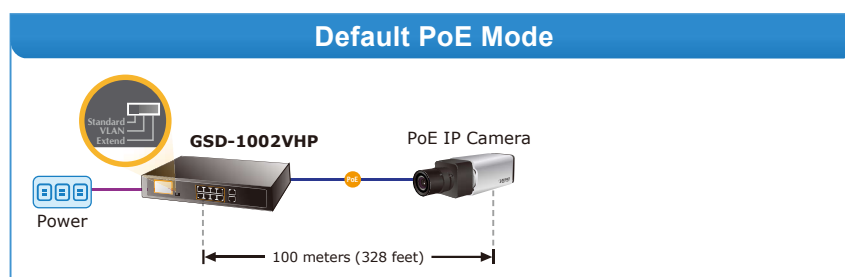
**VLAN and Ethernet Data Transmit Distance Extension**

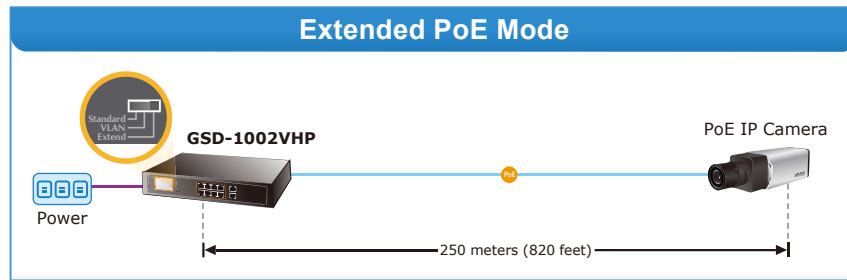
The built-in solid DIP switch provides “Standard”, “VLAN” and “Extend” operation modes. The GSD-1002VHP operates as a normal IEEE 802.3at/af PoE Switch in the “Standard” operation mode.

The “VLAN” operation mode features with port-based VLAN function that can help to prevent the IP camera’s multicast or broadcast storm from influencing each other.



In the “Extend” operation mode, the GSD-1002VHP 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 GSD-1002VHP 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.





### Two Gigabit Uplink Ports

The GSD-1002VHP provides 2 extra Gigabit ports supporting 10/100/1000BASE-T RJ45 copper for IP surveillance network devices such as NVR, video streaming server or NAS to facilitate surveillance management. With up to 1000Mbps transfer rate, it 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.

### Robust Protection

The GSD-1002VHP 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.

### Easy Installation and Cable Connection

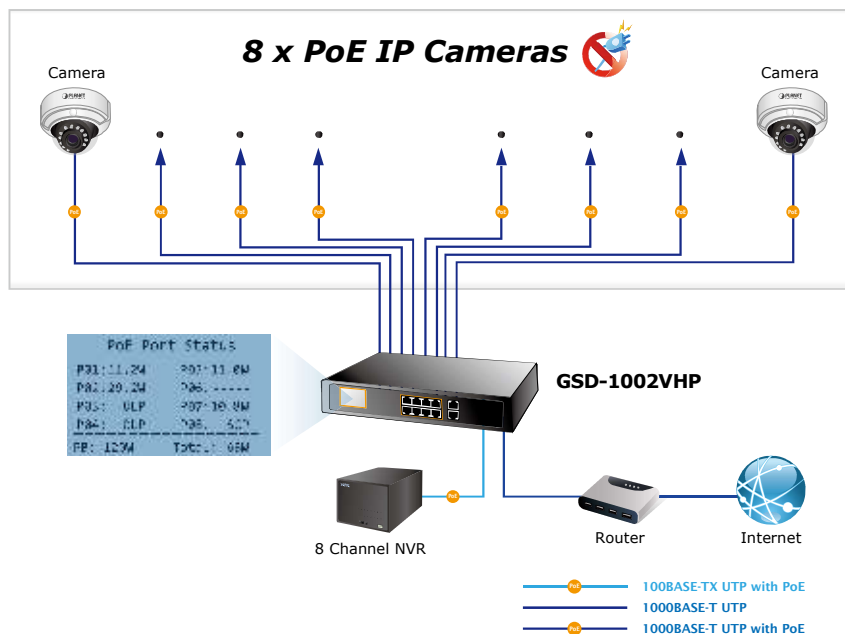
As data transfer and High Power PoE are transmitted over a cable, the GSD-1002VHP is able to reduce the need of extended cables and electrical outlets on the wall, ceiling or any unreachable place. It helps to lower the installation costs and simplify the installation effort. All RJ45 copper interfaces of the GSD-1002VHP 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 PoE IP Camera and NVR System

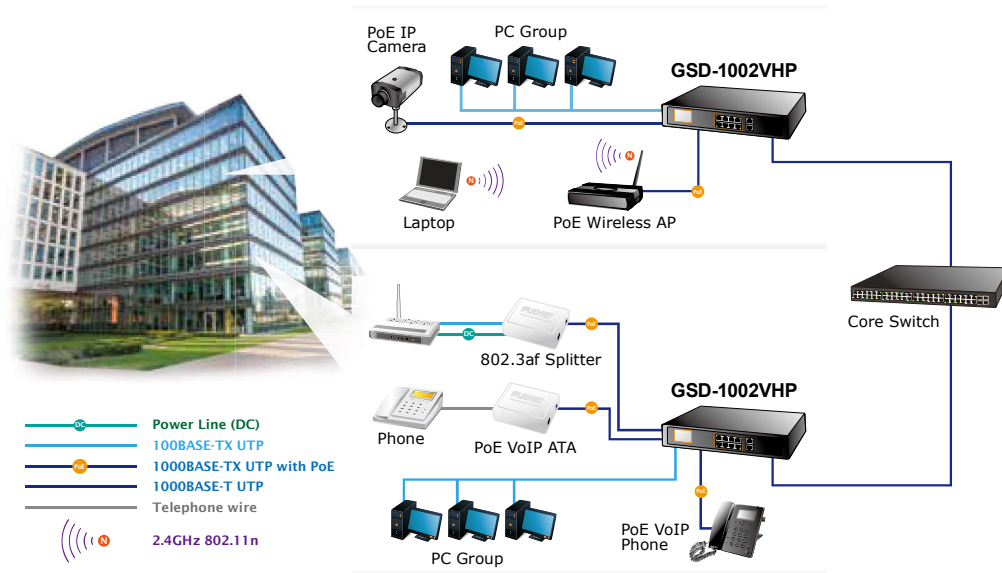
With its 20Gbps high-performance switch architecture and 120-watt PoE power budget, the recorded video files from the 8 PoE IP cameras can be powered by the GSD-1002VHP and saved in the 8-channel NVR systems or surveillance software to perform comprehensive security monitoring.

For instance, one GSD-1002VHP can be combined with one 8-channel NVR and 8 PoE IP cameras as a kit for the administrators to centrally and efficiently manage the surveillance system in the local LAN and the remote site via Internet. It is an ideal device for catering to medium scale of IP surveillance or public service PoE networks at a lower total cost.



*Department/Workgroup PoE Switch*

Providing eight 802.3at PoE+ in-line power interfaces, the GSD-1002VHP can easily build a power that centrally controls IP phone system, IP camera system and wireless AP group for enterprises. Cameras can be installed around the corner in the company or campus for surveillance demands. Without the power-socket limitation, the GSD-1002VHP makes the installation of cameras more easily and efficiently.



## Specifications

Model	GSD-1002VHP
<b>Hardware Specifications</b>	
10/100/1000BASE-T MDI/MDIX Ports	10
PoE Injector Port	8 ports with 802.3at/af PoE injector function with Port-1 to Port-8
Switch Architecture	Store-and-Forward
Switch Fabric	20Gbps/non-blocking
Switch Throughput@64 bytes	14.88Mpps@64Bytes
MAC Address Table	8K entries, automatic source address learning and aging
Maximum Frame Size	9K bytes
Flow Control	IEEE 802.3x pause frame for full-duplex Back pressure for half-duplex
LED	System: Power (Green) 10/100/1000BASE-T RJ45 Interfaces: 10/100Mbps LNK/ACT (Orange) 1000Mbps LNK/ACT ((Green) PoE interfaces: PoE-in-Use (Orange)
LCD Monitor	- PoE loading of each port - Total PoE power usage - Total PoE budget - System status, such as overload, low voltage, over voltage and high temperature
DIP Switch	Selectable operation mode - Standard - VLAN - Extend + VLAN
Dimensions (W x D x H)	180 x 280 x 44 mm (1U height)
Enclosure	Metal
Weight	1.8kg
Power Requirements	AC 100~240V, 50/60Hz, 2.5A max.
Power Consumption/Dissipation	Max. 135 watts/463.2 BTU
Thermal Fan	1
<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
PoE Power Output	Per port 52V DC, 600mA. max. 30 watts
Power Pin Assignment	1/2(+), 3/6(-)
PoE Power Budget	120 watts
Max. Number of Class 2 PDs	8
Max. Number of Class 3 PDs	8
Max. Number of Class 4 PDs	4
<b>Standards Conformance</b>	
Regulatory Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab Gigabit 1000BASE-T 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 (EEE)
<b>Environment</b>	
Operating	Temperature: 0 ~ 50 degrees C Relative Humidity: 5 ~ 95% (non-condensing)
Storage	Temperature: -10 ~ 70 degrees C Relative Humidity: 5 ~ 95% (non-condensing)

## Ordering Information

GSD-1002VHP	8-Port 10/100/1000T 802.3at PoE + 2-Port 10/100/1000T Desktop Switch with LCD PoE Monitor
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## Related Products

GSW-1820VHP	16-Port 10/100/1000T 802.3at PoE + 2-Port 1000X SFP Gigabit Ethernet Switch with LCD PoE Monitor (300W)
GSW-2620VHP	24-Port 10/100/1000T 802.3at PoE + 2-Port 1000X SFP Gigabit Ethernet Switch with LCD PoE Monitor (300W)
FGSD-1022VHP	8-Port 10/100TX 802.3at PoE + 2-Port Gigabit TP/SFP combo Desktop Switch with LCD PoE Monitor (120 Watts)
FGSW-1822VHP	16-Port 10/100TX 802.3at PoE + 2-Port Gigabit TP/SFP Combo Ethernet Switch with LCD PoE Monitor (300W)
FGSW-2622VHP	24-Port 10/100TX 802.3at PoE + 2-Port Gigabit TP/SFP Combo Ethernet Switch with LCD PoE Monitor (300W)

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GSD-1002VHP