# 8-Port 10/100/1000T 802.3at PoE + 2-Port 10/100/1000T + 2-Port 1000X SFP Ethernet Switch with PoE LCD Monitor
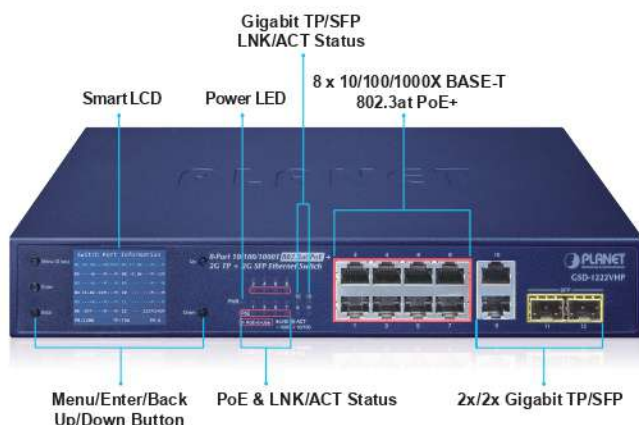


## Just "Plug and Watch" for a Quick Solution

PLANET GSD-1222VHP 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.



PLANET GSD-1222VHP is equipped with **8 10/100/1000BASE-T ports** with each port taking up **30 watts of PoE+** power, and **2 Gigabit TP** and **2 Gigabit SFP** interfaces with inner power system. With a total PoE+ power budget of 120 watts and non-blocking data switching performance, the GSD-1222VHP can fulfill 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.



### Physical Port

• 8-port 10/100/1000BASE-T Gigabit RJ45 copper

• 2 1000BASE-X mini-GBIC SFP interfaces

• 2 10/100/1000BASE-T TP interfaces

### 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 32 watts for each PoE port

• Each port supports 54V 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 in standard mode and 250m in extend mode

### Smart LCD

• The LCD switch features **"Standard"**, **"VLAN"** and **"Extend"** mode selection; the "Extend" mode features 30-watt PoE transmit distance of 250m at speed of 10Mbps and VLAN isolation

• The LCD switch is able to isolate ports to prevent broadcast storm and defend DHCP spoofing

• Power low-voltage, power over-voltage and PSE over-temperature protection

• Screen saver, fan control, factory default and save configuration

• PoE management
    – Total PoE power budget control
    – Per port PoE function enable/disable
    – PoE port power feeding priority
    – Per PoE port power limitation
    – PD alive check

### Switching

• Hardware-based 10/100/1000Mbps auto-negotiation and auto MDI/MDI-X

## Smart and Intuitive LCD Control

PLANET GSD-1222VHP provides an intuitive color panel on its front panel that facilitates the Ethernet management and PoE PD management. They greatly promote management efficiency in large-scale networks for enterprises, hotels, shopping malls, government buildings and other public areas, and feature the following special management and status functions:

- PoE management and status
- Port management and status
- Switch mode: Standard, VLAN, Extend
- Budget and bandwidth control
- PD alive check
- Maintenance: Screen saver, fan control, factory default and save configuration
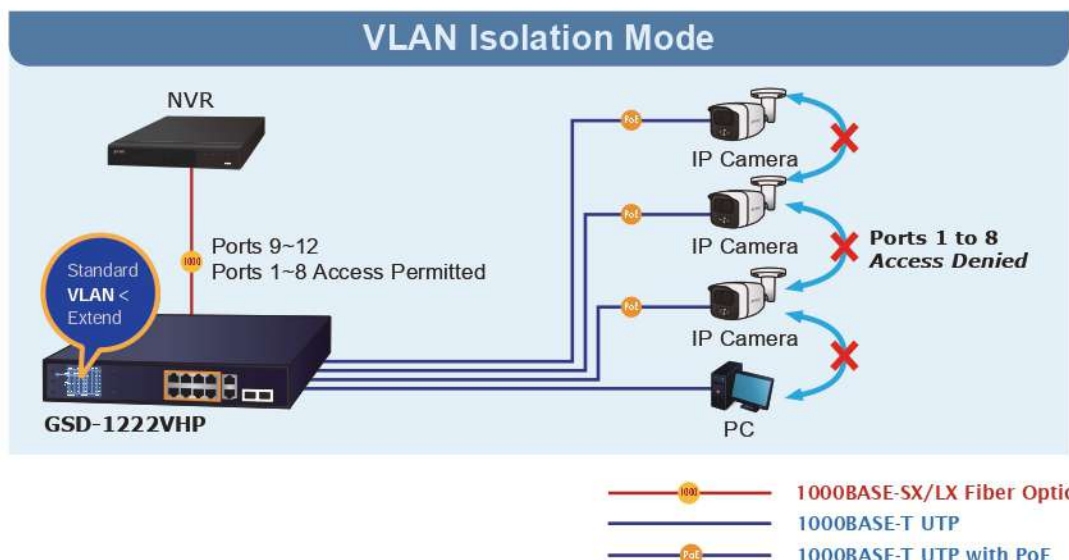


GSD-1222VHP

- Flow control for full duplex operation and back pressure for half duplex operation
- 9216bytes packet size
- Integrates address look-up engine, supporting 8K absolute MAC addresses
- IEEE 802.1Q VLAN transparency
- Automatic address learning and address aging

### Hardware

- 12-inch desktop size, 1U height, rack mountable
- 2-inch color LCD with smart management functions
- LED indicators for system power, per port PoE ready and PoE activity, speed, Link/Act
- 1 silent fan to provide stable and efficient power performance
- Supports Energy-Efficient Ethernet (EEE) function (IEEE 802.3az)
- Supports contact discharge of ±6KV DC and air discharge of ±8KV DC for Ethernet ESD protection
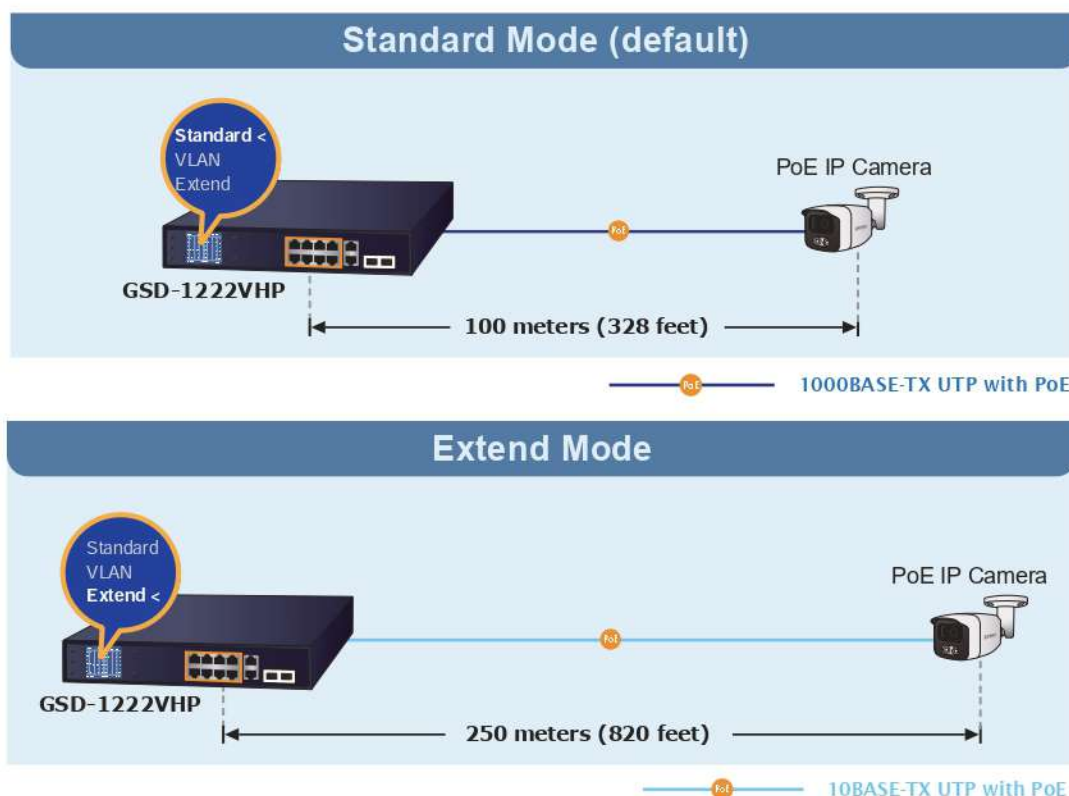- Supports ±6KV surge immunity

## Standard, VLAN and Extend Operation Modes Offered

PLANET GSD-1222VHP provides Standard, VLAN and Extend operation modes. The GSD-1222VHP operates as a normal IEEE 802.3af/at PoE Switch in the Standard operation mode. The VLAN operation mode features the port-based VLAN function that can help to prevent the IP camera's multicast or broadcast storm from influencing each other.



**VLAN Isolation Mode**

NVR

IP Camera

IP Camera

**Ports 1 to 8 Access Denied**

IP Camera

Ports 9~12
Ports 1~8 Access Permitted

Standard
**VLAN <**
Extend

GSD-1222VHP

PC

1000BASE-SX/LX Fiber Optic
1000BASE-T UTP
1000BASE-T UTP with PoE

In the Extend operation mode, the GSD-1222VHP 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-1222VHP 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.

## Standard Mode (default)

Standard <
VLAN
Extend

PoE IP Camera

GSD-1222VHP

100 meters (328 feet)

1000BASE-TX UTP with PoE

## Extend Mode

Standard
VLAN
Extend <

PoE IP Camera

GSD-1222VHP

250 meters (820 feet)

10BASE-TX UTP with PoE

### Flexible Extension Solution

PLANET GSD-1222VHP provides 2 extra Gigabit TP and 2 SFP interfaces supporting 10/100/1000BASE-T RJ45 copper for surveillance network devices such as NVR, video streaming server or NAS to facilitate surveillance management. Or through these Gigabit speed fiber SFP slots, the 1000BASE-SX/LX SFP (Small Form-factor Pluggable) fiber transceiver is inserted to be uplinked to a backbone switch and monitoring center over a long distance. The distance can be extended from 550m to 2km (multi-mode fiber), even going up to above 10/20/30/40/50/60/70/120km (single-mode fiber or WDM fiber). They are well suited for applications within the enterprise data centers and distributions.

### Robust Protection

PLANET GSD-1222VHP provides contact discharge of ±6KV DC and air discharge of ±8KV DC for Ethernet ESD protection. It also supports ±6KV surge immunity to improve product stability and protects users' networks from devastating ESD attacks, making sure the flow of operation does not fluctuate.
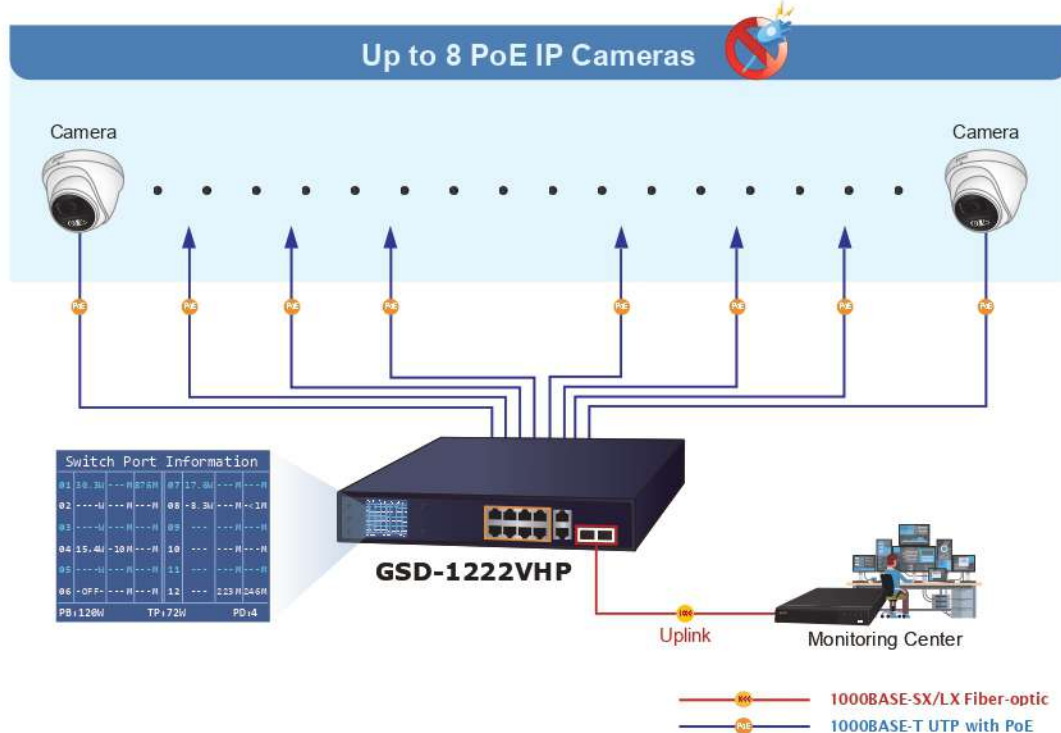
### Easy Installation and Cable Connection

As data and power are transmitted over one cable, the GSD-1222VHP does not need a second cable and electrical outlets on the wall, ceiling or any unreachable place. Thus, it helps to lower the installation costs and simplify the installation effort. All the RJ45 copper interfaces of the GSD-1222VHP 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*
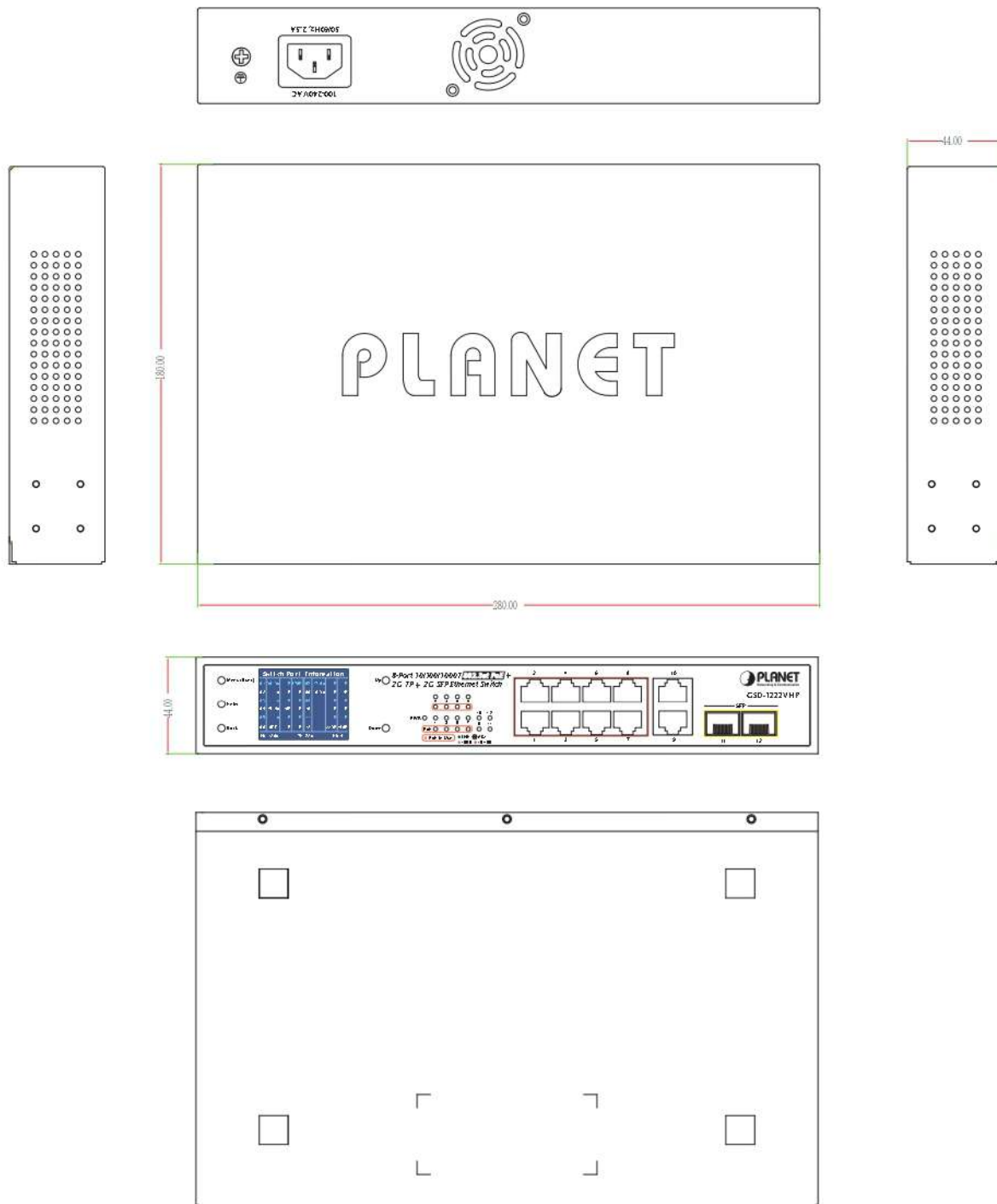
With its 24Gbps high-performance switch architecture and 120-watt PoE power budget, the recorded video files from the 8 PoE IP cameras powered by the GSD-1222VHP are saved in the 8-channel NVR systems or surveillance software in the monitoring center for possible backup references.



*Ideal PoE Switch for All Enterprises*

Providing eight 802.3at PoE+ in-line power interfaces, the GSD-1222VHP 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 need for power sockets, the GSD-1222VHP makes the installation of cameras easier and more efficient.

# Specifications

| Model | GSD-1222VHP |
|---|---|
| Hardware Specifications | |
| 802.3af/802.3at PoE Injector Port | 8 |
| 10/100/1000BASE-T MDI/MDIX Ports | 8 |
| 10/100/1000BASE-T MDI/MDIX Ports | 2 |
| 1000BASE-X SFP/mini-GBIC Slots | 2 |
| Switch Architecture | Store-and-Forward |
| Switch Fabric | 24Gbps/non-blocking |
| Switch Throughput@64 bytes | 18Mpps@64 bytes |
| MAC Address Table | 8K entries |
| Maximum Frame Size | 9216 bytes |
| Flow Control | IEEE 802.3x pause frame for full duplex; back pressure for half duplex |
| LED | System:<br>Power (Green)<br>PoE interfaces:<br>PoE-in-Use (Orange)<br>10/100/1000BASE-T RJ45 Interfaces:<br>10/100Mbps LNK/ACT (Red)<br>1000Mbps LNK/ACT (Green)<br>1000BASE-X SFP Interfaces:<br>LNK/ACT (Green) |
| LCD Monitor (W x D) | 40.6mm x 30.5mm, 2-inch |
| Buttons | Menu, Enter, Back, Up and Down |
| Dimensions (W x D x H) | 180 x 280 x 44mm (1U height) |
| Enclosure | Metal |
| Weight | 1671g |
| Power Requirements | 100~240V AC, 50/60Hz, 2.5A max. |
| Power Consumption/Dissipation | Max. 130 watts/446 BTU |
| Thermal Fan | 1 |
| ESD Protection | Contact discharge of ±6KV DC<br>Air discharge of ±8KV DC |
| Surge Protection | ±6KV |
| Power over Ethernet | |
| PoE Standard | IEEE 802.3af Power over Ethernet/PSE<br>IEEE 802.3at Power over Ethernet Plus/PSE |
| PoE Power Supply Type | End-span |
| PoE Power Output | Per port 54V DC, 300mA. max. 15.4 watts (IEEE 802.3af)<br>Per port 54V DC, 600mA. max. 30 watts (IEEE 802.3at) |
| 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 |
| Standards Conformance | |
| Regulatory Compliance | FCC Part 15 Class A, CE |
| Standards Compliance | IEEE 802.3 10BASE-T<br>IEEE 802.3u 100BASE-TX<br>IEEE 802.3ab Gigabit 1000BASE-T<br>IEEE 802.3z Gigabit SX/LX<br>IEEE 802.3x Flow control and back pressure<br>IEEE 802.3af Power over Ethernet<br>IEEE 802.3at Power over Ethernet Plus<br>IEEE 802.3az Energy Efficient Ethernet (EEE) |
| Environment | |
| Operating | Temperature: -10 ~ 60 degrees C<br>Relative Humidity: 10 ~ 90% (non-condensing)<br>* Temperature<40 degrees C; Humidity<90%<br>Temperature>40 degrees C; Humidity<50% |
| Storage | Temperature: -10 ~ 70 degrees C<br>Relative Humidity: 5 ~ 90% (non-condensing) |

## Dimensions



Unit: mm

## Ordering Information

| GSD-1222VHP | 8-Port 10/100/1000T 802.3at PoE + 2-Port 10/100/1000T + 2-Port 1000X SFP Ethernet Switch with PoE LCD Monitor |
|---|---|

## Related Products

| | |
|---|---|
| GSW-1820VHP | 16-Port 10/100/1000T 802.3at PoE + 2-Port Gigabit SFP Ethernet Switch with LCD PoE Monitor |
| GSW-2620VHP | 24-Port 10/100/1000T 802.3at PoE + 2-Port Gigabit SFP Ethernet Switch with LCD PoE Monitor |
| FGSD-1022VHP | 8-Port 10/100TX 802.3at PoE + 2-Port Gigabit TP/SFP Combo Desktop Switch with PoE LCD Monitor |
| FGSW-1822VHP | 16-Port 10/100TX 802.3at PoE + 2-Port Gigabit TP + 2-Port SFP Ethernet Switch with LCD PoE Monitor |
| FGSW-2622VHP | 24-Port 10/100TX 802.3at PoE + 2-Port Gigabit TP + 2-Port SFP Ethernet Switch with LCD PoE Monitor |
| HDP-1260PT | 1080p SIP Vandalproof Door Phone with RFID and 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-3280 | H.265 1080p Smart IR Bullet IP Camera |
| ICA-4480 | H.265 1080p Smart IR Dome IP Camera |
| ICA-3480F | H.265+ 4MP Full Color Bullet IP Camera |
| ICA-4480F | H.265+ 4MP Full Color Dome IP Camera |
| ICA-E6260 | 2 Mega-pixel PoE Plus Speed Dome IP Camera with Extended Support |
| ICA-M3580P | H.265 5 Mega-pixel Smart IR Bullet IP Camera with Remote Focus and Zoom |
| ICA-M4580P | H.265 5 Mega-pixel Smart IR Dome IP Camera with Remote Focus and Zoom |
| POE-162S | IEEE 802.3at Gigabit Power over Ethernet Plus Splitter |
| POE-E201 | IEEE 802.3at Power over Gigabit Ethernet Extender |
| WDAP-C1800AX | Dual Band 802.11ax 1800Mbps Ceiling-mount Wireless Access Point w/802.3at PoE+ & 2 10/100/1000T LAN Ports |
| WDAP-C7210E | 1200Mbps 802.11ac Wave 2 Dual Band Ceiling-mount Wireless Access Point w/802.3at PoE+ and 2 10/100/1000T LAN Ports |
| WDAP-W1800AXU | Dual Band 802.11ax 1800Mbps In-wall Wireless Access Point w/802.3at PoE+ and Type C USB |
| WDAP-1800AX | Dual Band 802.11ax 1800Mbps Outdoor Wireless AP |
| VIP-1120PT | High Definition Color PoE IP Phone |
| VIP-1140PT | High Definition Color PoE IP Phone |
| VIP-1260PT | High Definition Color PoE Gigabit IP Phone |
| ICF-1900 | High Definition Touch Color Screen Smart Media Android SIP Conference Phone |

GSD-1222VHP