

# 24-Port 10/100/1000Mbps 802.3at PoE+ Web Smart Ethernet Switch



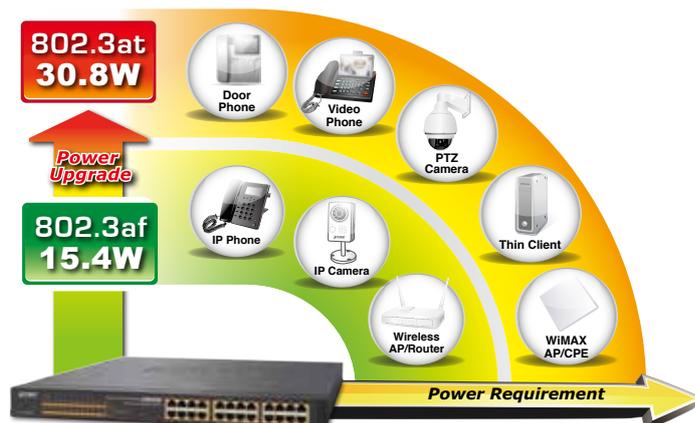
### Cost-Optimized Web Smart PoE+ Switch for Small and Medium Businesses

The PLANET GSW-2400HPS is an ideal PoE Switch which provides cost-effectiveness advantage to local area network and is widely accepted in SMB office network. It offers intelligent Layer 2 data packet switching and management functions, friendly web user interface and stable operation. The model complies with IEEE 802.3at Power over Ethernet Plus(PoE+) at an affordable price. The GSW-2400HPS is equipped with 24 10/100/1000Base-T gigabit Ethernet ports integrating with 802.3at PoE+ injector function on all ports. It offers a rack-mountable, affordable, safe and reliable power solution for SMB deploying Power over Ethernet networks, or requiring enhanced data security and network traffic management.



### IEEE 802.3at/af Compliant Power Source Switch

The PoE in-line power following the IEEE 802.3at/af standard makes the GSW-2400HPS able to deliver gigabit speed data and up to 30 watts of power per port to 24 PoE compliant powered devices (PDs) with a combined power output budget of up to 300 watts. The GSW-2400HPS provides more flexibility in power requirement for all kinds of PDs with affordable installation costs.



### Physical Port

- 24-Port 10/100/1000Base-T RJ-45 copper with IEEE 802.3at / 802.3af Power over Ethernet Injector function
- Reset button for system factory default

### Power over Ethernet

- Complies with IEEE 802.3at High Power over Ethernet PSE
- Complies with IEEE 802.3af Power over Ethernet PSE
- Up to 24 ports of IEEE 802.3af / 802.3at devices powered
- Supports PoE Power up to 30.8 watts for each PoE port
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100m

### Layer 2 Features

- Prevents packet loss with back pressure (Half-Duplex) and IEEE 802.3x PAUSE frame flow control (Full-Duplex)
- High performance of Store-and-Forward architecture and runt/CRC filtering eliminates erroneous packets to optimize the network bandwidth
- Supports VLAN
  - IEEE 802.1Q Tagged VLAN
  - Up to 32 VLANs groups, out of 4094 VLAN IDs
- Supports Static Trunk
  - Maximum 8 trunk groups, up to 4 ports per trunk group
  - Up to 8Gbps bandwidth (Duplex Mode)
- Provides Port Mirror (many-to-1)
- Port Mirroring to monitor the incoming or outgoing traffic on a particular port
- Port Isolation
- 1522 / 1536 / 1552 / 9216bytes Jumbo packet setting
- Loop Prevention / Detection
- Ethernet Link Energy-Saving technology

### Friendly Web-Based Management

For efficient management, the GSW-2400HPS is equipped with friendly Web interface for remote monitoring. It can be programmed for advanced switch management functions such as port configuration, 802.1Q VLAN, port trunk, QoS, bandwidth control, storm control and loop protection. These features provide a cost-effective way to manage the network devices through the Internet whenever you are at work or at home.



### Quick and Easy PoE Network Deployment

The PoE capabilities provided also helps to reduce deployment costs for network devices as a result of freeing from restrictions of power outlets on the wall, ceiling or any unreachable place. Power and data switching are integrated into one unit, delivered over a single Ethernet cable at the distance up to 100 meters. It thus eliminates cost for additional AC wiring and reduces installation time.

### Energy-Saving Design

The GSW-2400HPS uses new engine that incorporates two 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 GSW-2400HPS complies with IEEE 802.3az Energy Efficient Ethernet (EEE) standard to automatically lower power for a given port when it is not linked. The Intelligent Scales Power technology actively determines the appropriate power level based on the cable length. When connecting to the GSW-2400HPS with Ethernet cable shorter than 20m, a device can obtain maximum power saving because the GSW-2400HPS would automatically detect the Ethernet cable length and reduce power usage. The connected device can substantially reduce the overall power consumption, which makes a significant contribution to energy saving.

- Link down power saving
- Intelligent scales power based on cable length

### Quality of Service

- Ingress / Egress Rate Limit per port bandwidth control
- 4 priority queues on all switch ports
- Traffic classification:
  - Port-based priority
- Strict priority and Weight Fair Queue / Weighted Round Robin (WRR) policies

### Security

- Storm Control support
  - Broadcast / Multicast / Unknown-Unicast / Unknown-Multicast
- MAC Security
  - MAC Forwarding Table
  - Static MAC
- MAC Constrain

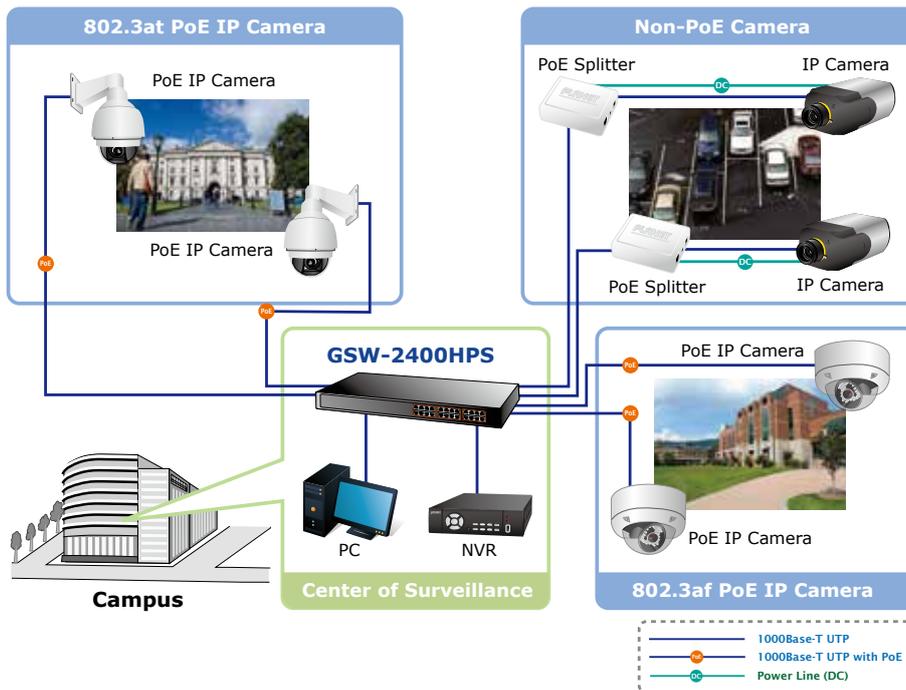
### Management

- IPv4 Web-based Management Interface
- Firmware upgrade through Web interface
- Configuration backup / restore through Web interface
- Reset button for system reset to factory default

## Application

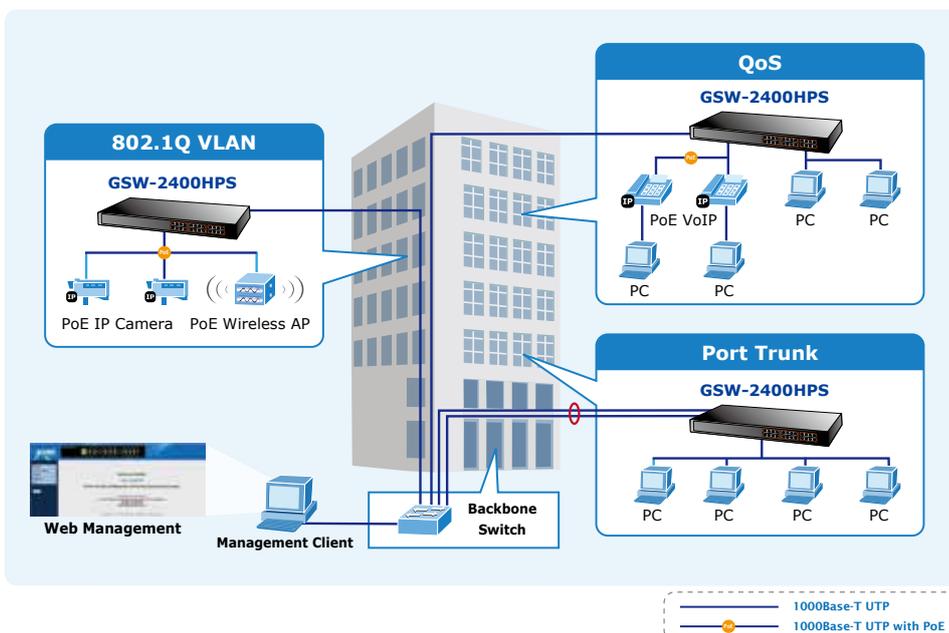
### Perfect Integrated Solution for PoE IP Surveillance

The GSW-2400HPS brings an ideal, secure surveillance system at a lower total cost. The GSW-2400HPS provides 24 10/100/1000Mbps 802.3at PoE+ ports able to feed sufficient PoE power for 24 IEEE 802.3af / IEEE 802.3at PoE IP cameras at the same time. It is also able to connect with one 16-Channel NVR or two 8-Channel NVR systems, uplink to the backbone switch and the monitor center. With such high performance switch architecture, the recorded video files from the PoE IP cameras can be saved in the NVR system via the administrators who can control and monitor the surveillance images both in the local LAN and the remote sites.



### Department / Workgroup PoE Network

Providing 24-port PoE in-line power interfaces, the GSW-2400HPS can easily build a power centrally-controlled 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 GSW-2400HPS makes the installation of cameras easier and more efficient.



## Specifications

Product	GSW-2400HPS
<b>Hardware Specification</b>	
Copper Ports	24 10/ 100/1000Base-T RJ-45 Auto-MDI/MDI-X Ports
PoE Injector Port	24 802.3af / 802.3at PoE Injector Ports
LED Indicators	<b>System:</b> Power (Green) <b>PoE Ethernet Interfaces</b> PoE In-Use (Orange) 1000 LNK / ACT (Green), 10/100 LNK / ACT (Orange)
Switch Processing Scheme	Store-and-Forward
MAC Addresss Table	8K entries
Switch Fabric	48Gbps / non-blocking
Throughput @ 64Kbytes	35.7Mpps
Share Data Buffer	3.5Mbit SRAM Packet Buffer
Flow Control	IEEE 802.3x Pause Frame for Full-Duplex. Back pressure for Half-Duplex
Jumbo Frame	9216 Bytes
Power Consumption	Max. 330 watts / 1122 BTU
Power Requirements	AC 100~240V, 50/60Hz, 4A max.
Dimensions (W x D x H)	445 x 207 x 45 mm (1U height)
Weight	2.76kg
<b>Power over Ethernet</b>	
PoE Standard	IEEE 802.3af Power over Ethernet / PSE IEEE 802.3at Power over Ethernet Plus / PSE
PoE Power Output	Per Port 52V DC, 300mA. Max. 15.4 watts (IEEE 802.3af) Per Port 52V DC, 600mA. Max. 30 watts (IEEE 802.3at)
PoE Power Budget	300 watts
Number of PDs, 7 watts	24
Number of PDs, 15.4 watts	19
Number of PDs, 30.8 watts	9
<b>Layer 2 Function</b>	
Management Interfaces	IPv4 Web Browser
Port Configuration	Port disable / enable Auto-negotiation 10/100/1000Mbps full and half duplex mode selection Flow Control disable / enable Display each port's state, speed duplex mode, flow control status
Port Statistics	Display each port's state, link status, packet transmit / receive counter
VLAN	802.1Q Tagged Based VLAN Up to 32 VLAN groups, out of 4094 VLAN IDs
QoS	<ul style="list-style-type: none"> <li>• 4 priority queues on all switch ports</li> <li>• Traffic classification based, Strict priority and Weight Fair Queue / Weighted Round Robin (WRR) policies</li> <li>– Port-based priority</li> </ul>
Trunk	Static Trunk Features 8 groups of 4-port trunk support
Port Mirroring	Port mirroring allows monitoring of the traffic across any port in real time
Port Isolation	Yes
Bandwidth Control	Ingress / Egress Rate Limit per port
Storm Control	Broadcast / Multicast / Unknown-Unicast / Unknown-Multicast
Jumbo Frame	1522 / 1536 / 1552 / 9216bytes Jumbo packet setting
Loop Protection	Loop Prevention / Detection
Green Networking	Enable / Disable
Security	MAC Security – MAC Forwarding Table – Static MAC MAC Constrain
Cable Diagnostics	Support
Configuration Management	Configuration backup / restore through Web interface
Firmware Upgrade	Web interface

Standards Conformance	
Regulation Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX IEEE 802.3ab 1000Base-T IEEE 802.3x Flow Control IEEE 802.1p QoS IEEE 802.1Q VLAN Tagging IEEE 802.3af Power over Ethernet IEEE 802.3at High Power over Ethernet
Environment	
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

GSW-2400HPS	24-Port 10/100/1000Mbps 802.3at PoE+ Web Smart Ethernet Switch
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## Related PoE Products

ICA-2200	Full HD PoE Box IP Camera
ICA-2500	5 Mega-Pixel PoE Box IP Camera
ICA-3250V	Full HD Outdoor IR PoE IP Camera
ICA-3350V	3 Mega-Pixel Vari-Focal Bullet IR IP Camera
ICA-4200V	Full HD 20M IR Vari-Focal Dome IP Camera
ICA-5350V	3 Mega-Pixel Vandalproof IR IP Camera
ICA-8350	3 Mega-Pixel Vandalproof Fisheye IP Camera
ICA-HM101	2 Mega-Pixel PoE Cube IP Camera
ICA-HM126	H.264 Full HD Box 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-HM312	2 Mega-Pixel 25M IR Outdoor Bullet PoE IP Camera
ICA-HM316	2 Mega-Pixel Outdoor IR PoE 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-152S	IEEE 802.3af Power over Ethernet Splitter
POE-162S	IEEE 802.3at Gigabit High Power over Ethernet Splitter
POE-E101	IEEE 802.3af Power over Ethernet Extender
POE-E201	IEEE 802.3at Power over Ethernet Extender
WNAP-C3220	802.11n Wireless Ceiling Mount PoE Access Point
WNAP-1120PE	802.11n Wireless Access Point with PoE
ICF-1700	Touch Screen Internet Multimedia Phone
VIP-255PT	Multi-Language PoE IP Phone
VIP-256PT	802.3af PoE SIP IP Phone
VIP-360PT	Business PoE IP Phone
VIP-361PE	Professional PoE IP Phone (5-Line)
VIP-560PT	Professional PoE IP Phone

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