

# 24-Port 10/100/1000T 802.3at PoE + 2-Port 1000X SFP Gigabit Ethernet Switch

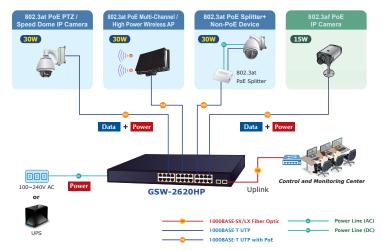


#### Cost-optimized, Configure-free Gigabit PoE+ Switch for System Integrators

PLANET GSW-2620HP, an ideal Gigabit PoE Switch, provides a cost-effective advantage to local area networks of SMBs. Offering Layer 2 data packet switching and stable operation, this model also complies with IEEE 802.3at Power over Ethernet Plus (PoE+) at an affordable price. The GSW-2620HP is equipped with 24 10/100/1000BASE-T Gigabit Ethernet ports and 2 1000BASE-X SFP interfaces with inner power system. Its 24 Gigabit Ethernet ports are integrated with an 802.3at PoE+ injector function. It offers a rack-mountable, safe and reliable power solution for SMBs deploying Power over Ethernet networks.

#### IEEE 802.3at PoE+ Compliant Power Source Switch

The PoE in-line power following the **IEEE 802.3at/af standard** makes the GSW-2620HP 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 **240 watts**. The GSW-2620HP provides more flexibility in power requirement for all kinds of PDs with affordable installation costs.



#### Ethernet Data Transmit Distance Extension

The built-in solid DIP switch provides "Standard", "VLAN" and "Extend" operation modes. The GSW-2620HP operates as a normal IEEE 802.3at PoE+switch in the "Standard" operation mode.

#### **Physical Port**

- 24-port 10/100/1000BASE-T Gigabit RJ45 copper with 802.3at PoE+ injector function
- · 2 1000BASE-X SFP slots

#### Power over Ethernet

- Complies with IEEE 802.3af/at Power over Ethernet endspan PSE
- Up to 24 ports of IEEE 802.3af/802.3at devices powered
- Supports PoE power up to 30 watts for each PoE port
- · Each port supports 54V DC power to PoE powered device
- · 240-watt PoE budget
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- · 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 8K absolute MAC addresses
- 9K jumbo frame supports all speeds (10/100/1000Mbps)
- · IEEE 802.1Q VLAN transparency
- Hardware DIP switch for Standard, VLAN and Extend mode selection:
  - VLAN mode: Ports 1 to 22 cannot communicate with each other, but can communicate with the uplink ports 23 to 24 and SFP ports 25 to 26
  - Extend mode: Ports1 to 8 have data rate of 10Mbps.
     The farthest transmission distance up to 250 meters and all ports can communicate with each other.
- The DIP switch can isolate ports to prevent broadcast storm and defend DHCP spoofing
- · Automatic address learning and address aging
- Supports Energy-Efficient Ethernet (EEE) function (IEEE 802.3az)

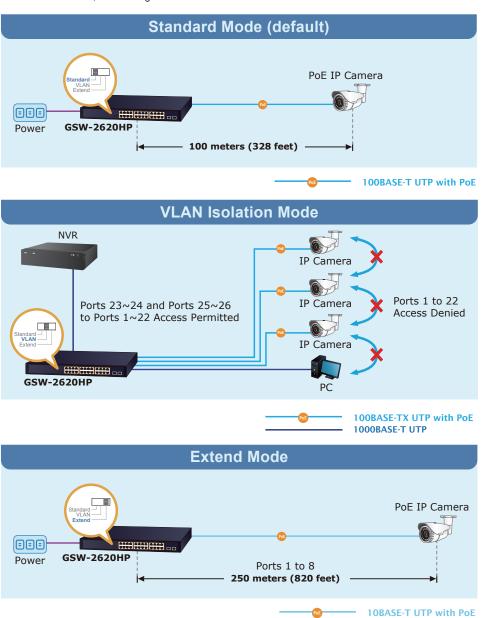
#### Hardware

- · 19-inch desktop size, 1U height
- · LED indicators for PoE ready and PoE activity
- · Ethernet Link Energy-saving technology
  - Link down power savings
  - Intelligent use of power based on cable length



The "VLAN" operation mode features with port-based VLAN function that helps to prevent the IP camera's multicast or broadcast storm from influencing each other.

In the "Extend" operation mode, the GSW-2620HP operates on a per-port basis at 10Mbps duplex operation but supports 22-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 GSW-2620HP provides an additional solution for 802.3at PoE+ distance extension, thus saving the cost of Ethernet cable installation.



#### Energy-saving Design

The GSW-2620HP uses new engine that incorporates two advanced Green Networking technologies:

- Idle Mode Link Down power savings
- Intelligent use of power based on cable length

The Idle Mode Link Down power saving of the GSW-2620HP 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 use of power feature actively determines the appropriate power level based on the cable length. When connecting to the GSW-2620HP with Ethernet cable shorter than 20m, a device can obtain maximum power savings because the GSW-2620HP 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 savings.



#### Easy Installation and Cable Connection

Providing data transfer and high PoE in one unit, the GSW-2620HP 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 GSW-2620HP 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-through or crossover cables.

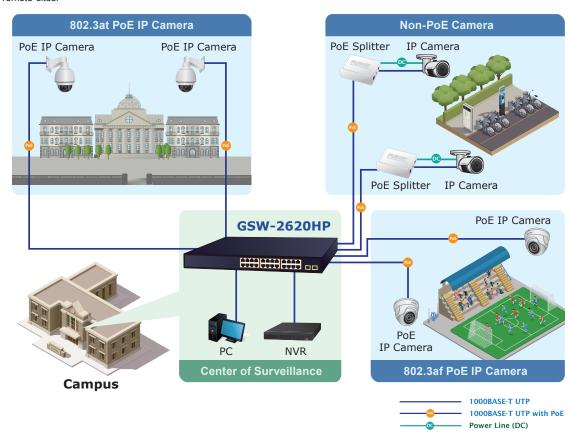
#### Flexible Extension Solution

The two mini-GBIC slots built in the GSW-2620HP are compatible with the **1000BASE-SX/LX** SFP (Small Form-factor Pluggable) fiber transceiver, uplinked to backbone switch and monitoring center in long distance. The distance can be extended from 550 meters (multi-mode fiber) to 10/20/30/40/50/60/70/120 kilometers (single-mode fiber or WDM fiber). They are well suited for applications within the enterprise data centers and distributions.

## **Applications**

#### Perfect Integration Solution for PoE IP Surveillance

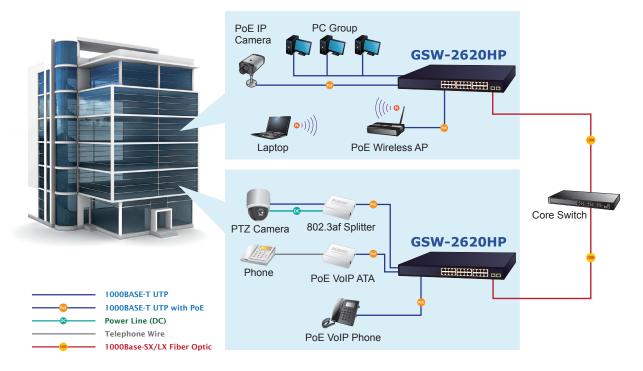
The GSW-2620HP brings an ideal, secure surveillance system at a lower total cost; the GSW-2620HP provides 24 10/100/1000Mbps 802.3at PoE ports able to feed sufficient PoE power for 24 IEEE 802.3at/7 IEEE 802.3at PoE IP cameras at the same time. It is also able to connect with one 16-channel NVR or two 8-channel NVR systems, uplinked to the backbone switch and the monitoring center. With such high-performance switch architecture, the recorded video files from the PoE IP cameras can be saved in the NVR system to enable the administrators to control and monitor the surveillance images both in the local LAN and the remote sites.





#### Department/Workgroup PoE Network

Providing 24 PoE in-line power interfaces, the GSW-2620HP can easily build a power where IP phone system, IP camera system and wireless AP group for enterprises can be centrally controlled. The GSW-2620HP delivers full ports of 802.3af/at compliant Gigabit Ethernet network connectivity with high-performance and cost-effective advantages for the increasing number of PoE IP telephones, PoE IP cameras, PoE wireless access points and other devices applied at the edge of the small or medium enterprise network.





# Specifications

Model	GSW-2620HP					
Hardware Specifications						
10/100/1000BASE-T Copper Ports	24 auto-MDI/MDI-X ports					
802.3af/802.3at PoE+ Injector Port	24					
1000BASE-X SFP/mini-GBIC Slots	2					
	Selectable operation mode					
	■ Standard					
DIP Switch	■VLAN					
	■ Extend					
Dimensions (W x D x H)	440 x 208 x 44 mm (1U height)					
Enclosure	Metal					
Weight	2.79kg					
Power Requirements	100~240V AC, 50/60Hz, 3A max.					
Power Consumption/Dissipation	Max. 282 watts/962 BTU					
Thermal Fan	2					
	6KV surge protection					
Protection	8KV ESD protection					
	System:					
	Power (Green)					
	10/100/1000T RJ45 Interfaces					
LED Indicators	1000 LNK / ACT (Green), 10/100 LNK/ACT (Amber), PoE (Amber)					
	1000X SFP Interfaces					
	1000 LNK / ACT (Green)					
Switching	1000 Elitty No. 1 (Stoon)					
Switch Architecture	Store-and-Forward					
Switch Fabric	52Gbps/non-blocking					
Switch Throughput@64bytes MAC Address Table	38.7Mpps  8K entries					
Jumbo Frame	9216 bytes					
Flow Control	IEEE 802.3x pause frame for full duplex; back pressure for half duplex					
Power over Ethernet	ILLE 602.3x pause traine for full duplex, back pressure for fiant duplex					
rower over Ethernet	IEEE 802.3at Power over Ethernet Plus/PSE					
PoE Standard	Backward compatible with IEEE 802.3af Power over Ethernet					
PoE Power Supply Type	End-span: 1/2 (+), 3/6 (-)					
TOL TOWER Supply Type	Per port 54V DC, 300mA. max. 15.4 watts (IEEE 802.3af)					
PoE Power Output	Per port 54V DC, 600mA. max. 30 watts (IEEE 802.3at)					
DoE Dower Budget	240 watts					
PoE Power Budget Number of PDs, 7 watts	24 24					
Number of PDs, 15.4 watts	15					
	8					
Number of PDs, 30 watts Standards Conformance	•					
	FOC Part 45 Class A OF					
Regulatory Compliance	FCC Part 15 Class A, CE					
	IEEE 802.3 10BASE-T					
	IEEE 802.3u 100BASE-TX					
	IEEE 802.3ab Gigabit 1000BASE-T					
Standards Compliance	IEEE 802.3z Gigabit SX/LX					
	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					
	Relative Humidity: 5 ~ 95% (non-condensing)					
Storage	Temperature: -10 ~ 70 degrees C  Relative Humidity: 5 ~ 95% (non-condensing)					

# Ordering Information

GSW-2620HP	24-Port 10/100/1000T 802.3at PoE + 2-Port 1000X SFP Gigabit Ethernet Switch



### Related PoE Products

ICA-HM620	2 Mega-pixel PoE Plus Speed Dome Internet Camera
ICA-E6260	2 Mega-pixel PoE Plus Speed Dome IP Camera
WDAP-8350	600Mbps Dual Band 802.11n Outdoor Wireless CPE
VIP-1120PT	High Definition Color PoE IP Phone
VIP-2140PT	High Definition Color PoE IP Phone with Dual Display
VTS-700P	7-inch SIP Indoor Touch Screen PoE Video Intercom
HDP-5240PT	720p SIP Multi-unit Door Phone with RFID and PoE
HDP-5260PT	720p SIP Multi-unit Apartment Vandalproof Door Phone with RFID and PoE
POE-161S	IEEE 802.3at Gigabit Power over Ethernet Plus Splitter with 5V/12VDC output (10/100/1000Mbps)
POE-162S	IEEE 802.3at Gigabit Power over Ethernet Plus Splitter with 12V/24VDC output (10/100/1000Mbps)
IPOE-162S	Industrial IEEE 802.3at Gigabit High Power over Ethernet Splitter
POE-E201	IEEE 802.3at Power over Gigabit Ethernet Extender
POE-E202	1-port 802.3at PoE+ to 2-port 802.3af/at Gigabit PoE Extender
LRP-101C-KIT	1-Port Long Reach PoE over coax Extender Kit (LRP-101CH + LRP-101CE)
LRP-101U-KIT	1-Port Long Reach PoE over UTP Extender Kit (LRP-101UH + LRP-101UE)

## Available 1000Mbps Modules

Gigabit Ethernet Transceiver (1000BASE-X SFP)

Model	DDM	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (nm)	Operating Temp.
MGB-GT		1000	Copper		100m		0 ~ 60 degrees C
MGB-SX(V2)	YES	1000	LC	Multi Mode	550m	850nm	0 ~ 60 degrees C
MGB-SX2(V2)	YES	1000	LC	Multi Mode	2km	1310nm	0 ~ 60 degrees C
MGB-LX(V2)	YES	1000	LC	Single Mode	20km	1310nm	0 ~ 60 degrees C
MGB-L40	YES	1000	LC	Single Mode	40km	1310nm	0 ~ 60 degrees C
MGB-L80	YES	1000	LC	Single Mode	80km	1550nm	0 ~ 60 degrees C
MGB-L120(V2)	YES	1000	LC	Single Mode	120km	1550nm	0 ~ 60 degrees C
MGB-TSX	YES	1000	LC	Multi Mode	550m	850nm	-40 ~ 75 degrees C
MGB-TSX2	YES	1000	LC	Multi Mode	2km	1310nm	-40 ~ 75 degrees C
MGB-TLX(V2)	YES	1000	LC	Single Mode	20km	1310nm	-40 ~ 75 degrees C
MGB-TL40	YES	1000	LC	Single Mode	40km	1310nm	-40 ~ 75 degrees C
MGB-TL80	YES	1000	LC	Single Mode	80km	1550nm	-40 ~ 75 degrees C

Gigabit Ethernet Transceiver (1000BASE-BX, Single Fiber Bi-directional SFP)

Model	DDM	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (TX)	Wavelength (RX)	Operating Temp.
MGB-LA10(V2) MGB-LB10(V2)	VEC	1000	WDM(LC)	Single Mode	10km	1310nm	1550nm	0 ~ 60 degrees C
	TES	1000	WDM(LC)	Single Mode	10km	1550nm	1310nm	0 ~ 60 degrees C
MGB-LA20(V2)	YES	1000	WDM(LC)	Single Mode	20km	1310nm	1550nm	0 ~ 60 degrees C
MGB-LB20(V2)	IES	1000	WDM(LC)	Single Mode	20km	1550nm	1310nm	0 ~ 60 degrees C
MGB-LA40(V2) MGB-LB40(V2)	VEC	1000	WDM(LC)	Single Mode	40km	1310nm	1550nm	0 ~ 60 degrees C
	ILO	1000	WDM(LC)	Single Mode	40km	1550nm	1310nm	0 ~ 60 degrees C
MGB-LA80	YES	1000	WDM(LC)	Single Mode	80km	1490nm	1550nm	0 ~ 60 degrees C
MGB-LB80	IES	1000	WDM(LC)	Single Mode	80km	1550nm	1490nm	0 ~ 60 degrees C
MGB-TLA10(V2)	YES	1000	WDM(LC)	Single Mode	10km	1310nm	1550nm	-40 ~ 75 degrees C
MGB-TLB10(V2)	IES	1000	WDM(LC)	Single Mode	10km	1550nm	1310nm	-40 ~ 75 degrees C
MGB-TLA20 MGB-TLB20	VEC	1000	WDM(LC)	Single Mode	20km	1310nm	1550nm	-40 ~ 75 degrees C
	TES	1000	WDM(LC)	Single Mode	20km	1550nm	1310nm	-40 ~ 75 degrees C
MGB-TLA40 MGB-TLB40	YES	1000	WDM(LC)	Single Mode	40km	1310nm	1550nm	-40 ~ 75 degrees C
		1000	WDM(LC)	Single Mode	40km	1550nm	1310nm	-40 ~ 75 degrees C
MGB-TLA60	YES	1000	WDM(LC)	Single Mode	80km	1490nm	1550nm	-40 ~ 75 degrees C
MGB-TLB60		1000	WDM(LC)	Single Mode	80km	1550nm	1490nm	-40 ~ 75 degrees C

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