

Product Specifications

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

GSW-2620HP

Version 2.0

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Change History:

Revision:	Date:	Author:	Change List
Version 2.0	2019/3/4	Marc Liao	Initial Release Hardware Revision. - PoE Controller Chip Replacement PowerDsine PD69102 to IC Plus IP808 - Hardware Per Port PoE PIN Assignment change to be 1/2 (+), 3/6 (-)
Version 1.0	2015/10/28	Marc Liao	Initial Release

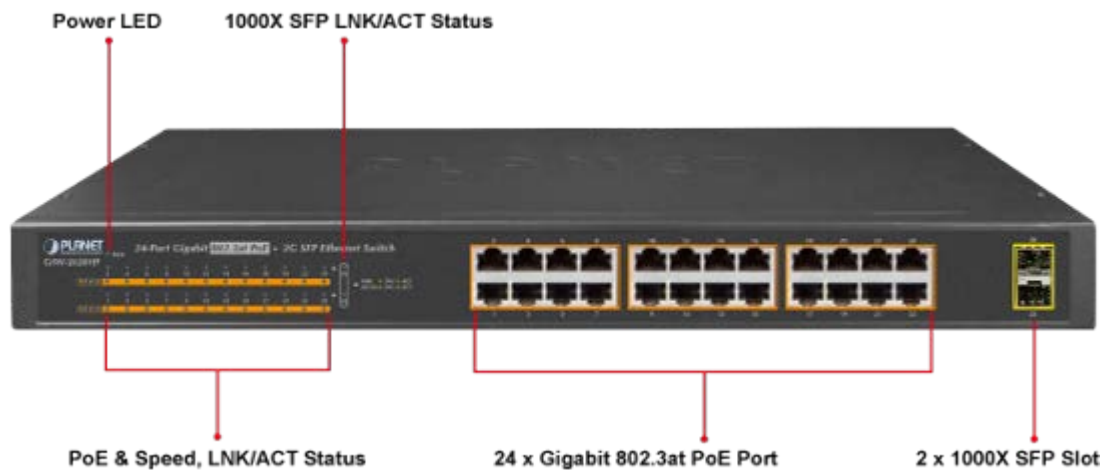
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Reviewed By:		Approved By:	Kent Kang

1. PRODUCT DESCRIPTION



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/af 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 220 watts. The GSW-2620HP provides more flexibility in power requirement for all kinds of PDs with affordable installation costs.

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.

2. PRODUCT FEATURES

▶ **Physical Port**

- 24-port 10/100/1000BASE-T Gigabit RJ45 copper
- 2 1000BASE-X mini-GBIC/SFP slots

▶ **Power over Ethernet**

- Complies with IEEE 802.3at Power over Ethernet Plus
- Complies with IEEE 802.3af Power over Ethernet
- Up to 24 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
- 220-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
- 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

3. PRODUCT SPECIFICATIONS

3.1 MAIN COMPONENTS

Switch ASIC:	Realtek RTL8382L x 1
Gigabit Ethernet PHY:	Realtek RTL8218B x 2
PoE Control	IC Plus IP808 x 3
Power Supply Unit	Gospell G0591-33012520A x 1. 51V/4.7A+5V/4A (260 watts)

3.2 FUNCTION 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
Switch Architecture	Store-and-Forward
Switch Fabric	52Gbps/non-blocking
Switch Throughput@64bytes	38.6Mpps
MAC Address Table	8K entries
Jumbo Frame	9216 bytes
Flow Control	IEEE 802.3x pause frame for full duplex; back pressure for half duplex
LED	System: Power (Green) 10/100/1000T RJ45 Interfaces 1000 LNK / ACT (Green), 10/100 LNK/ACT (Amber), PoE (Amber) 1000X SFP Interfaces 1000 LNK / ACT (Green)
Enclosure	Metal
Power Requirements	100~240V AC, 50/60Hz, 4A max.
Power Consumption/Dissipation	Max. 260 watts/887 BTU
Thermal Fan	2
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: 1/2 (+), 3/6 (-)
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	220 watts
Number of PDs, 7 watts	24
Number of PDs, 15.4 watts	14
Number of PDs, 30 watts	7

Standards Conformance	
Standards Compliance	IEEE 802.3 10BASE-T
	IEEE 802.3u 100BASE-TX
	IEEE 802.3ab Gigabit 1000BASE-T
	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	

3.3 PHYSICAL SPECIFICATIONS:

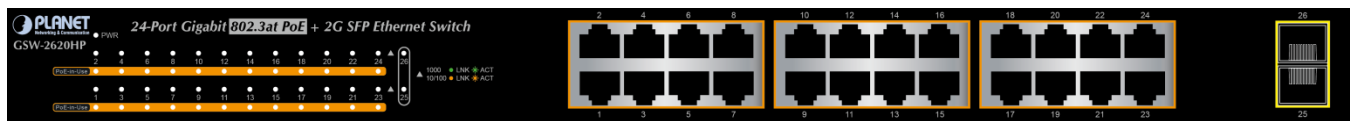
■ **Dimensions:**

445 x 207 x 45 mm (W x D x H, 1U height)

■ **Weight:**

2.85kg

■ **Front Panel:**



■ **Rear Panel:**



■ **LED Definition**

■ **System**

LED	Color	Function
PWR	Green	Lights to indicate the Switch has power.

■ **Per 10/100/1000BASE-T Port**

LED	Color	Function
1000 LNK/ACT	Green	Lights to indicate the link through that port is successfully established at 1000Mbps. Blinks to indicate that the Switch is actively sending or receiving data over that port.
10/100 LNK/ACT	Amber	Lights to indicate the link through that port is successfully established at 10/100Mbps. Blinks to indicate that the Switch is actively sending or receiving data over that port.
PoE in Use	Amber	Lights to indicate the port is providing 52V DC in-line power.

■ Per 1000BASE-X SFP Interface

LED	Color	Function
1000 LNK/ACT	Green	Lights to indicate the link through that port is successfully established at 1000Mbps. Blinks to indicate that the Switch is actively sending or receiving data over that port.

3.4 ENVIRONMENTAL SPECIFICATIONS

Operating:

Temperature: 0°C ~ 50 degrees C

Relative Humidity: 5% ~ 95% (non-condensing)

Storage:

Temperature: -10°C ~ 70 degrees C

Relative Humidity: 5% ~ 95% (non-condensing)

3.5 ELECTRICAL SPECIFICATIONS

Input Voltage:	100~240V AC, 50/60Hz, 4A (max.)	
Power Consumption (System on):	110V: 17 watts	58BTU
	220V: 17 watts	58BTU
Power Consumption (Ethernet Full Loading):	110V: 28.5 watts	97BTU
	220V: 28.5 watts	97BTU
Power Consumption (PoE Full Loading):	110V: 234 watts *	798BTU
	220V: 226 watts *	771BTU

* With a total PoE power output limited at 220 watts

3.6 REGULATORY COMPLIANCE

FCC Part 15 Class A, CE

3.7 RELIABILITY

MTBF > 50,000 hrs @ 25 degrees C

3.8 BASIC PACKAGING

- The GSW-2620HP x 1
- User's Manual x 1
- Power Cord x 1
- Rubber Feet x 4
- SFP Dust Cap x 2
- Rack-mount Accessory Kit x 1

3.9 PACKING INFORMATION

Box Dimensions (W x D x H):	555 x 295 x 88 mm
Gross Weight:	4.18kg
Carton Dimensions (W x D x H):	572 x 370 x 315 mm
Total Weight:	18.6kg
Quantity:	4pcs per carton