

Product Specifications

8-Port 10/100/1000T 802.3at PoE + 1-Port Gigabit Desktop Switch

GSD-908HP

Version 2.0

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Change History:

Revision:	Date:	Author:	Change List
Version 1.0	2014/6/30	Marc Liao	Initial Release
Version 2.0	2017/1/10	Marc Liao	Power Adapter Replacement Change DC 51V 2.5A to DC 51V 2A. Change DC jack dimension from 2.5mm to 2.1mm.

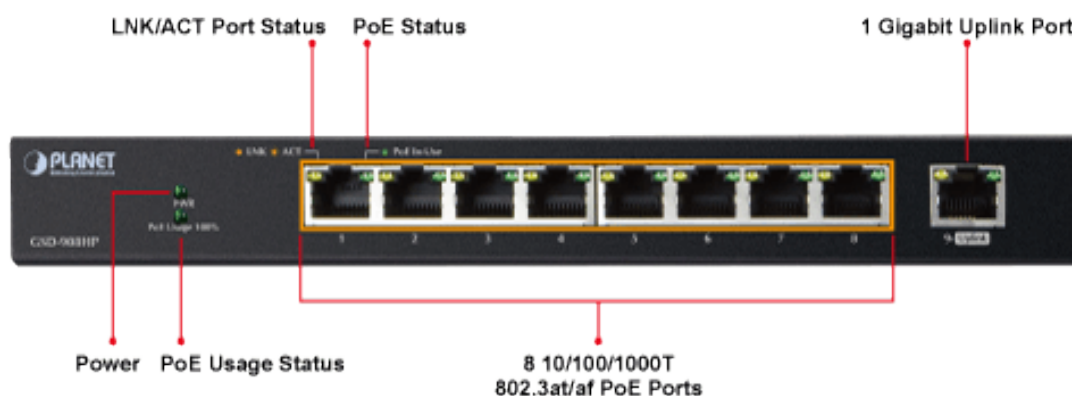
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Reviewed By:	Kent Kang	Approved By:	Kent Kang

1. PRODUCT DESCRIPTION



Centralized Power Distribution for Ethernet Networking

The GSD-908HP, a member in the PLANET 802.3af / 802.3at PoE Unmanaged Gigabit Ethernet Switch family, is an **8-port 10/100/1000T 802.3at Power over Ethernet + 1-port 10/100/1000T Desktop Switch** with a total of 100 watts of PoE budget, which is an ideal solution to fulfilling the demand of sufficient PoE power for network applications with Gigabit Ethernet speed transmission. The eight 802.3af / 802.3at PoE Gigabit ports provide PoE power injector function which is able to drive 8 IEEE 802.3af compliant powered devices or 3 IEEE 802.3at compliant powered devices. The GSD-908HP also provides a simple, cost-effective and non-blocking Gigabit wire-speed performance. It comes with a metal compact housing, suitable for desktop deployment in SOHO office or department network application.



Perfectly Integrated Solution for PoE IP Camera and NVR System

Different from the general PoE Switch which usually comes with 12 or 24 PoE ports, the GSD-908HP provides eight 802.3af / 802.3at PoE Gigabit ports for catering to small scale of IP surveillance networks at a lower total cost. The GSD-908HP comes with high performance switch architecture and 100-watt PoE power budget. The recorded video files from 8 PoE IP cameras can be powered by the GSD-908HP and saved in the 8-channel NVR system or surveillance software to perform comprehensive security monitoring. For instance, one GSD-908HP 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.



Stable and High Performance Switch Architecture

The GSD-908HP has a 4K MAC address table, featuring high performance switch architecture capable of providing the non-blocking 18Gbps switch fabric and wire-speed throughput as high as 13.3Mpps, which greatly simplifies the tasks of upgrading the LAN for catering to increasing bandwidth demands. Besides, the 802.3x full-duplex flow control function of the GSD-908HP enables PD devices and servers to be directly connected to the switch for wire-speed packet transfer performance without the risk of packet loss.

The GSD-908HP RJ45 copper interfaces support 10/100/1000Mbps Auto-Negotiation at port 1 to port 9 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 or crossover cables.

Easy Cable Connection

With data and power over Ethernet from one unit, the GSD-908HP reduces cabling requirements and eliminates the need for dedicated electrical outlets on the wall, ceiling or any unreachable place. A wire that carries both data and power can lower the installation costs, simplify the installation effort and eliminate the need for electricians or extension cords. Providing 8 PoE interfaces, the GSD-908HP is ideal for small businesses and workgroups requiring the PoE deployment of wireless access points, IP-based surveillance camera or IP phones in any places with ease, efficiency and cost-effectiveness.

2. PRODUCT FEATURES

■ **RJ45 Interface**

- Complies with IEEE 802.3, 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T
- 9-Port 10/100/1000Mbps Gigabit Ethernet Switch
- 8-Port supports 51V DC power to PoE Powered Device (Port 1 to port 8)

■ **Power over Ethernet**

- Complies with IEEE 802.3af / 802.3at Power over Ethernet End-Span PSE
- Up to 8 IEEE 802.3af devices powered
- Supports PoE Power up to 15.4 watts for each PoE port
- Up to 4 IEEE 802.3at devices powered
- Supports PoE Power up to 30 watts for each PoE port
- 100-watt PoE budget
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100m

■ **Switching**

- Hardware based 10/100Mbps, half / full duplex and 1000Mbps full duplex mode, flow control and auto-negotiation and auto MDI/MDI-X
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- IEEE 802.3x flow control for full duplex operation and back pressure for half duplex operation
- Integrates address look-up engine, supporting 4K absolute MAC addresses
- 192 KB packet buffer
- 9K Jumbo frame supports at 1000Mbps duplex mode
- Automatic address learning and address aging
- Supports CSMA/CD protocol

■ **Hardware**

- Made of metal, desktop size and wall-mount design
- LED indicators for system power, PoE usage 100%, per port PoE In-Use (Port 1 to port 8), per port Link / Act (10/100/1000Mbps, port 1 to port 9).
- 51V DC, 2A external power adapter
- FCC, CE Class A compliant

3. PRODUCT SPECIFICATIONS

3.1 MAIN COMPONENTS

Switch ASIC: Broadcom BCM53128 x 1

PoE Controller: PowerDsine PD69008 x 1

3.2 FUNCTION SPECIFICATIONS

Model	GSD-908HP	
Hardware Specifications		
Network Connector	9-Port RJ45 for 10/100/1000BASE-T	
PoE Inject Port	8-Port with 802.3af / 802.3at PoE injector function	
LED Display	System: Power (Green), PoE Usage 100% (Green) Per PoE port: PoE (Green), port 1 to port 8 LNK/ACT (Orange), port 1 to port 9	
Switch Architecture	Store and forward	
MAC Address Table	4K MAC address table with auto learning function	
Data Buffer	192 KB	
Switch Fabric	18Gbps	
Switch Throughput	13.3Mpps@64Bytes	
Flow Control	Back pressure for half duplex. IEEE 802.3x pause frame for full duplex	
Jumbo Frame	9K	
Power Requirements	DC 51V, 2A max.	
Power Consumption	100 watts / 341BTU	
Power over Ethernet		
PoE Standard	IEEE 802.3af / 802.3at Power over Ethernet PSE	
PoE Power Supply Type	End-Span	
PoE Power Output	Per port 51V DC, 350mA. max. 15.4 watts Per port 51V DC, 600mA. max. 30 watts	
Power Pin Assignment	1/2(+), 3/6(-)	
PoE Power Budget	100 watts	
Max. Number of Class 2 PDs	8	
Max. Number of Class 3 PDs	7	
Max. Number of Class 4 PDs	3	
Standard Conformance		
Standard Compliance	IEEE 802.3 IEEE 802.3u IEEE 802.3ab IEEE 802.3x IEEE 802.3af IEEE 802.3at	Ethernet Fast Ethernet Gigabit Ethernet Flow Control Power over Ethernet Power over Ethernet Plus

3.3 PHYSICAL SPECIFICATIONS:

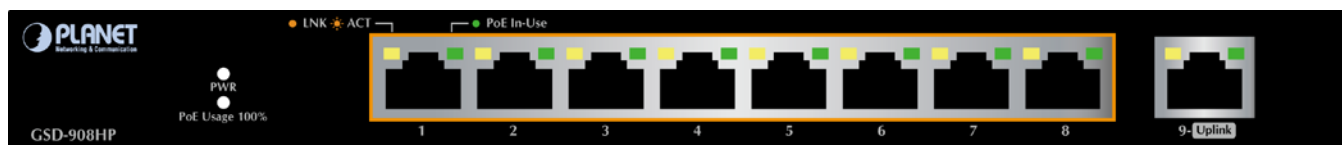
■ Dimensions:

103 x 235 x 27 mm (W x D x H)

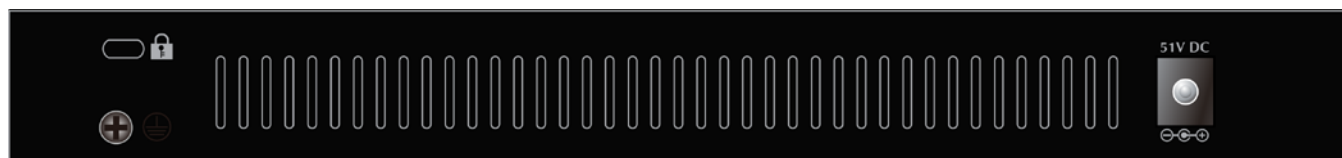
■ Weight:

628g

■ Front Panel:



■ Rear Panel:



■ LED Definition

■ System

LED	Color	Function
PWR	Green	Light: Indicates the switch has power.
PoE Usage 100%	Green	Light: Indicates the system has 100% PoE power usage.

■ Per 10/100/1000T Port

LED	Color	Function
LNK/ACT	Orange	Light: indicates the link through that port is successfully established at 10/100/1000Mbps. Blink: indicates that the switch is actively sending or receiving data over that port.
PoE-in-Use	Green	Light: indicates the port is providing 51V DC in-line power (1-8 ports).

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 SPECIFICATION

Input Voltage:	DC 51V, 2A max.	
Power Consumption (System on):	110V: 3.5 watts	12 BTU
	220V: 3.6 watts	12 BTU
Power Consumption (Ethernet Full Load):	110V: 3.8 watts	13 BTU
	220V: 3.9 watts	13 BTU
Power Consumption (PoE Full Load):	110V: 105 watts *	358 BTU
	220V: 105 watts *	358 BTU

* With total PoE power output be limited at 100 watts

3.6 REGULATORY COMPLIANCE

FCC Class A, CE.

3.7 RELIABILITY

MTBF > 50,000 hrs @ 25 degrees C

3.8 BASIC PACKAGING

- GSD-908HP x 1
- User's Manual x 1
- External AC to DC Adapter x 1
- Power Cord x 1
- Wall Mount Kit x 1
- Magnet / Screw x 4
- Rubber Feet x 4

3.9 PACKING DIMENSIONS

Dimensions: Box 302 (W) × 212 (D) × 78 mm (H)

Dimensions: Carton 410 (W) × 320 (D) × 440 mm (H)

Weight (Total): TBD (gross weight)

Carton Unit: 10pcs in one carton