

# **8-Port 10/100/1000Mbps 802.3at PoE+ Desktop Switch**

**GSD-808HP**


User's Manual

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## 1. Package contents

Thank you for purchasing PLANET 802.3at PoE Gigabit Switch, GSD-808HP. Open the box of the Gigabit PoE Switch and carefully unpack it. The box should contain the following items:

Gigabit PoE Switch x 1	User's Manual x 1
	
Power Cord x 1	Accessories x 1
	

If any of these are missing or damaged, please contact your dealer immediately; if possible, retain the carton including the original packing material, and use them again to repack the product in case there is a need to return it to us for repair.

## 2. Product Features

### ■ Physical Port

- 8 10/100/1000BASE-T Gigabit Ethernet RJ45 ports with IEEE 802.3at PoE+ Injector
- Power over Ethernet
- Complies with IEEE 802.3at Power over Ethernet Plus/end-span PSE
- Up to 8 IEEE 802.3af/802.3at devices powered
- Supports PoE power up to 30 watts for each PoE port
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- PoE Usage Alarm LED
- 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 4K absolute MAC addresses
- 9K jumbo frame supports all speeds (10/100/1000Mbps)
- Automatic address learning and address aging
- Supports Pre-Energy-Efficient Ethernet (EEE) function (IEEE 802.3az)

### ■ Case and Installation

- 12-inch desktop size, 1U height
- LED indicators for PoE ready, PoE activity and PoE Usage Alarm
- Fanless design
- Rack-mountable, Plug-and-Play installation
- Ethernet Link Energy-saving technology
- Link down power saving
- Intelligent scales power based on cable length



### Note

**PSE (Power Sourcing Equipment)** is a device (switch or hub for instance) that will provide power in a PoE setup. The maximum allowed continuous output power per such device in IEEE 802.3af is 15.4 watts and in IEEE 802.3at is 30 watts.

**PD (Powered Device)** such as IP phone, network camera or wireless access point is a PoE-enabled terminal that consumes energy supplied by PSE.

### 3. Product Specifications

Model	GSD-808HP
Hardware Specifications	
Copper Ports	8 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports
PoE Inject Port	8 ports with 802.3at/af PoE injector function with Port-1 to Port-8
LED Indicators	System: Power (Green) PoE Usage Alarm: 1-4 (Orange) 5-8 (Orange) Port 1 to Port 8 1000 LNK/ACT (Green) 10/100 LNK/ACT (Orange) PoE-in-Use (Orange)
Switch Architecture	Store-and-Forward
Address Table	4K entries, automatic source address learning and aging
Switch Fabric	16Gbps/non-blocking
Throughput (packet per second)	11.9Mpps@64 bytes
Jumbo Frames	9Kbytes
Power Requirement	AC 100~240V, 50/60Hz, 2A max.
Power Consumption	Max. 150 watts/511 BTU
Dimensions (W x D x H)	280 x 180 x 44 mm
Weight	1670g

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
PoE Power Output	Per port 52V DC max. 30.8 watts
Power Pin Assignment	1/2(+), 3/6(-)
PoE Power Budget	130 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 B, CE
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX/100BASE-FX IEEE 802.3ab Gigabit 1000T 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
Storage Temperature	0 ~ 50 degrees C
Humidity	5 ~ 95% (non-condensing)

## 4. Hardware Description

### 4.1 Front Panel

The Front Panel of the GSD-808HP PoE Ethernet Switch consists of 8x auto-sensing 10/100/1000Mbps Ethernet RJ45 ports. The LED Indicators are also located on the front panel of the GSD-808HP.

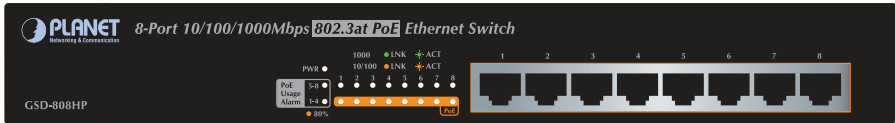


Figure 4-1: GSD-808HP Switch Front Panel

### 4.2 Rear Panel

The rear panel of the GSD-808HP indicates an AC inlet power socket, which accepts input power from 100 to 240V AC, 50-60Hz.

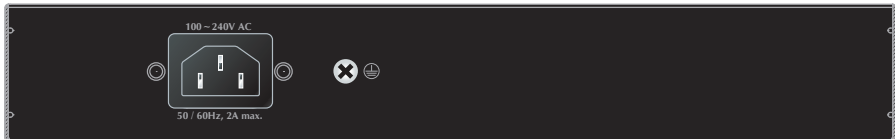


Figure 4-2: GSD-808HP Switch Rear Panel



Power  
Notice

1. The device is a power-required device, meaning it will not work till it is powered. If your networks should be active all the time, please consider using UPS (Uninterrupted Power Supply) for your device. It will prevent you from network data loss or network downtime.
2. In some areas, installing a surge suppression device may also help to protect your GSD-808HP from being damaged by unregulated surge or current to the GSD-808HP or the power adapter.



## LED Definition

### System

LED	Color	Function
PWR	Green	<b>Lights</b> to indicate the Switch has power.

### Per 10/100/1000Mbps Port

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

### PoE Usage Alarm Port

LED	Color	Function
1-4	Orange	<b>Lights</b> to indicate the PoE usage is over 80% <b>Blinks</b> to indicate the PoE usage is over 95%
5-8	Orange	<b>Light</b> to indicate the PoE usage is over 80% <b>Blinks</b> to indicate the PoE usage is over 95%

## 5. Hardware Installation

This section describes the functionalities of the Gigabit Ethernet Switch's components and guides how to install it on the desktop and rack mount. Basic knowledge of networking is assumed. Please read this chapter completely before continuing.



Note

This following picture shows the user how to install the device, but the device is not the GSD-808HP.

### 5.1 Desktop Installation

To install the Switch on the desktop, simply follow the steps below:

**Step1:** Attach the rubber feet to the recessed areas on the bottom of the Switch, as shown in Figure 5-1.

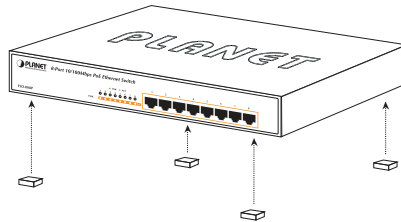


Figure 5-1: Attaching the Rubber Feet to the Switch

**Step 2:** Place the Switch on the desktop near an AC power source.

**Step 3:** Keep enough ventilation space between the Switch and the surrounding objects.

**Step 4:** Connect your Switch to 802.3af/at compliant powered devices and other network devices.

- A. Connect one end of a standard network cable to the 10/100/1000 RJ45 ports on the front panel of the Switch.
- B. Connect the other end of the cable to the network devices such as printer servers, workstations and router.

**Step 5:** Supply power to the Switch.

**A.** Connect one end of the power cable to the Switch.

**B.** Connect the power plug of the power cable to a standard wall outlet.

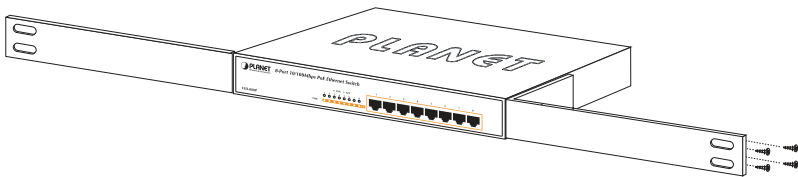
When the Switch receives power, the power LED should remain solid green.

## 5.2 Rack Mounting

To install the Switch in a 19-inch standard rack, follow the instructions described below.

**Step 1:** Place your Switch on a hard flat surface, with the front panel positioned towards your front side.

**Step 2:** Attach a rack-mount bracket to each side of the Switch with supplied screws attached to the package. Figure 5-2 shows how to attach brackets to one side of the Switch.



**Figure 5-2:** Attaching the Brackets to the Switch.

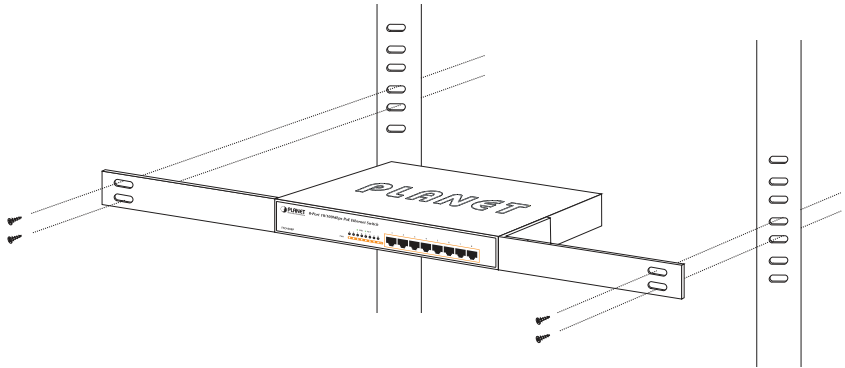


You must use the screws supplied with the mounting brackets. Damage caused to the parts by using incorrect screws would invalidate the warranty.

**Step 3:** Secure the brackets tightly.

**Step 4:** Follow the same steps to attach the second bracket to the opposite side.

**Step 5:** After the brackets are attached to the Switch, use suitable screws to securely attach the brackets to the rack, as shown in Figure 5-3.



**Figure 5-3:** Mounting the Switch in a Rack

**Step 6:** Proceed with Steps 4 and 5 of Section 5.1 Desktop Installation to connect the network cabling and supply power to your Switch.

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## 6. Troubleshooting

This chapter contains information to help you solve problems. If the Switch is not functioning properly, make sure the Ethernet Switch was set up according to instructions in this manual.

### ■ The Link LED is not lit

#### Solution:

Check the cable connection and remove duplex mode of the Switch.

### ■ Performance is bad

#### Solution:

Check the full duplex status of the Switch. If the Ethernet Switch is set to full duplex and the partner is set to half duplex, then the performance will be poor.

### ■ 100BASE-TX port link LED is lit, but the traffic is irregular

#### Solution:

Check that the attached device is not set to dedicate full duplex. Some devices use a physical or software switch to change duplex modes. Auto-negotiation may not recognize this type of full-duplex setting.

### ■ Why the Switch doesn't connect to the network

#### Solution:

1. Check the LNK/ACT LED on the switch.
2. Try another port on the Switch.
3. Make sure the cable is installed properly.
4. Make sure the cable is the right type.
5. Turn off the power. After a while, turn on power again.

### ■ Why it cannot be powered on after connecting PoE device to GSD-808HP

#### Solution:

Please check what cable type is used for connecting the GSD-808HP (port 1 to port 8) to the other end. The cable should be an 8-wire UTP, Category 5 or above, and EIA568 cable within 100 meters. A cable with only 4-wire, short loop or over 100 meters will affect the power supply.

Please make sure the device is fully complied with IEEE 802.3af/at standard.

### ■ What is the power output of each PoE port?

#### Solution:

1. Each PoE port supports **52V DC, 535mA**, and a maximum power output of **30 watts**, which are detected and injected by the standard of IEEE 802.3at.
2. Each PoE port supports **52V DC, 275mA**, and a maximum power output of **15.4 watts**, which are detected and injected by the standard of IEEE 802.3af.

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## **7. Customer Support**

Thank you for purchasing PLANET products. You can browse our online FAQ resource and user's manual on PLANET Web site first to check if it could solve your issue. If you need more support information, please contact PLANET switch support team.

PLANET online FAQ:

<http://www.planet.com.tw/en/support/faq.php?type=1>

Switch support team mail address:

[support\\_switch@planet.com.tw](mailto:support_switch@planet.com.tw)

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## EC Declaration of Conformity

For the following equipment:

\*Type of Product: 8-Port 10/100/1000Mbps 802.3at PoE Desktop Switch

\*Model Number: GSD-808HP

\* Produced by:

Manufacturer's Name : **Planet Technology Corp.**  
Manufacturer's Address: 10F., No.96, Minquan Rd., Xindian Dist.,  
New Taipei City 231, Taiwan, R.O.C.

is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility Directive on 2014/30/EU; Low Voltage Directive 2014/35/EU.

For the evaluation regarding the EMC, the following standards were applied:

EN 55032	(2012 + AC:2013)
EN 61000-3-2	(2014)
EN 61000-3-3	(2013)
EN 55024	(2010)
EN 60950-1	(2006+A11:2009+A1:2010+A12:2011+A2: 2013)

Responsible for marking this declaration if the:

Manufacturer       Authorized representative established within the EU

Authorized representative established within the EU (if applicable):

Company Name: **Planet Technology Corp.**

Company Address: 10F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan, R.O.C.

Person responsible for making this declaration

Name, Surname      **Kent Kang**

Position / Title :      **Director**

Taiwan

Place

June 16, 2017

Date

  
Legal Signature

### **PLANET TECHNOLOGY CORPORATION**

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