1. Package Contents

Thank you for purchasing PLANET 8-Port 10/100/1000T 802.3at PoE + 2-Port 2.5G 802.3at PoE + 1-Port 10G SFP+ Ethernet Switch, GSD-1121XP. In the following sections, the term **"802.3at PoE+ Switch"** means the GSD-1121XP.

Open the box of the 802.3at PoE+ Switch and carefully unpack it. The box should contain the following items:

802.3at PoE+ Switch x 1		User's Manual x 1	Power Cord x 1
			
SFP Dust Cap x 1	Screws x 8	Rack-mounting Brackets x 2	Rubber Feet x 4
			

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. Hardware Introduction

2.1 Switch Front Panel

The front panel of the 802.3at PoE+ Switch consists of 8 auto-sensing 10/100/1000BASE-T RJ45 ports, 2 auto-sensing 100/1G/2.5GBASE-T RJ45 ports and 1 10GBASE-X SFP+ port. Figure 2-1 shows the front panel of the 802.3at PoE+ Switch.

➢ Front View

Figure 2-1: GSD-1121XP Front Panel

■ Gigabit TP Interface

Eight 10/100/1000BASE-T RJ45 ports with 802.3af/at PoE+ injector function, and auto-MDI/MDI-X

■ 2.5G TP Interface

Two 100/1G/2.5GBASE-T RJ45 ports with 802.3af/at PoE+ injector function, and auto-MDI/MDI-X

■ 10G SFP+ Port

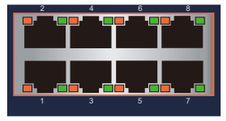
One 10GBASE-X SFP+ port for transceiver module, enabling to have a networking distance of 300 meters to 2km (multi-mode fiber) and 10/20/40/60/80 kilometers (single-mode fiber)

2.2 LED Indicators

System

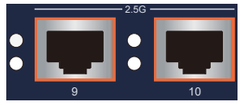
LED	Color	Function
PWR	Green	**Lit:** It indicates it has power.

Per Gigabit TP Port



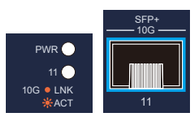
LED	Color	Function
PoE-in-Use	Amber	Lights to indicate that the port is providing PoE to remote powered device.
		Off to indicate that the port is not a PoE powered device (PD).
10/100/1000 LNK/ACT	Green	Lights to indicate that the copper port is successfully connecting to the network at 10/100/1000Mbps.
		Blinks to indicate the copper port is receiving or sending data.

Per 2.5G TP Port



LED	Color	Function
PoE-in-Use	Amber	Lights to indicate that the port is providing PoE to remote powered device.
		Off to indicate that the port is not a PoE powered device (PD).
100/1G/2.5G LNK/ACT	Green	Lights to indicate that the copper port is successfully connecting to the network at 100/1000/2500Mbps.
		Blinks to indicate the copper port is receiving or sending data.

10G SFP+ Port



LED	Color	Function
Fiber LNK/ACT	Amber	Lights to indicate that the fiber optic port is successfully connecting to the network at 10Gbps.
		Blinks to indicate the fiber optic port is receiving or sending data.

2.3 Rear Panel

The rear panel of the 802.3at PoE+ Switch indicates an AC power socket and a switch, which accepts input power from 100 to 240V AC, 50-60Hz, 2.5A.

Figure 2-2: GSD-1121XP Switch Rear Panel

AC Power Receptacle

Power Notice

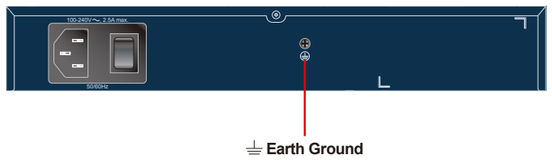
The device is a power-required device, which means it will not work till it is powered. If your networks should be active all the time, please consider using UPS (uninterrupted power supply) for your device. It will prevent you from network data loss or network downtime.

Power Notice

In some areas, installing a surge suppression device may also help to protect your 802.3at PoE+ Switch from being damaged by unregulated surge or current to the 802.3at PoE+ Switch or the power adapter.

2.4 Grounding the Device

Users MUST complete grounding wired with the device; otherwise, a sudden lightning could cause fatal damage to the device.



Note

EMD (Lightning) DAMAGE IS NOT CONVERED UNDER WARRANTY.

3. Hardware Installation

3.1 Rack Mounting

To install the 802.3at PoE+ Switch in a 19-inch standard rack, follow the instructions described below.

Step 1: Place your 802.3at PoE+ 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 802.3at PoE+ Switch with supplied screws attached to the package. Figure 3-1 shows how to attach brackets to one side of the 802.3at PoE+ Switch.

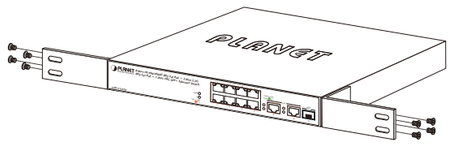


Figure 3-1: Attaching the Brackets to the 802.3at PoE+ Switch.

Caution

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 802.3at PoE+ Switch, use suitable screws to securely attach the brackets to the rack, as shown in Figure 3-2.

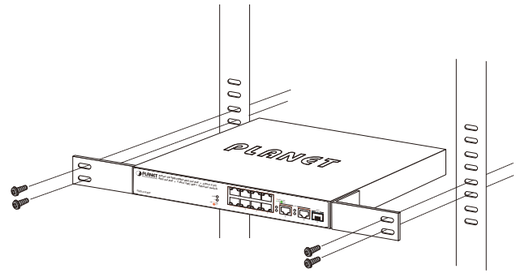


Figure 3-2: Mounting the 802.3at PoE+ Switch in a Rack

Step 6: Connect your 802.3at PoE+ Switch to 802.3af/802.3at complied PDs and other network devices.

A. Connect one end of a standard network cable to the 100/1G/2.5GBASE-T RJ45 ports or 10GBASE-X SFP+ port on the front panel of the 802.3at PoE+ Switch.

B. Connect the other end of the cable to the network devices such as printer servers, workstations or routers, etc.

Step 7: Supply power to the 802.3at PoE+ Switch.

A. Connect one end of the power cable to the 802.3at PoE+ Switch.

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

When the 802.3at PoE+ Switch receives power, the Power LED should remain solid Green.

3.2 Installing the SFP+ Transceiver

The sections describe how to insert an SFP+ transceiver into an SFP+ port of the 802.3at PoE+ Switch.

The SFP+ transceivers are hot-pluggable and hot-swappable. You can plug in and out the transceiver to/from any SFP+ port without having to power down the 802.3at PoE+ Switch, as the Figure 3-3 shows.

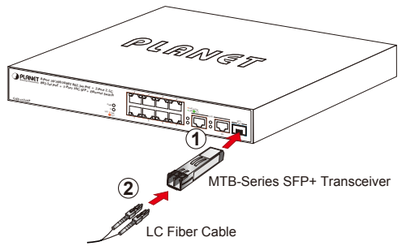


Figure 5-3: Plugging in the SFP+ Transceiver

■ Approved PLANET SFP+ Transceivers

PLANET 802.3at PoE+ Switch supports both single mode and multi-mode SFP+ transceivers. The following website link of approved PLANET SFP+ transceivers is correct at the time of publication:
http://www.planet.com.tw/en/product/product.php?id=11027

Note	It is recommended to use PLANET SFP+ on the 802.3at PoE+ Switch. If you insert an SFP+ transceiver that is not supported, the 802.3at PoE+ Switch will not recognize it.

Weight	1711g
Power Requirements	100~240V AC, 50/60Hz
Power Consumption/ Dissipation	124 watts @ AC 110V 125 watts @ AC 240V
LED	1 x LED for Power: ■ Green: AC Power 2 x LED for Per Copper Port (Port-1~Port-8): ■ Green: 10/100/1000 LNK/ACT ■ Amber: PoE-in-Use 2 x LED for Per Copper Port (Port-9~Port-10): ■ Green: 100/1G/2.5G LNK/ACT ■ Amber: PoE-in-Use 1 x LED for SFP+ interface (Port-11) ■ Amber: 10G LNK/ACT
Switching Specification	
Switch Processing Scheme	Store-and-Forward
Switch fabric	46Gbps
Throughput (packet per second)	34.2Mpps @64 bytes
Address Table	16K entries
Jumbo Frame	9600 Bytes
Flow Control	Back pressure for half duplex IEEE 802.3x pause frame for full duplex

PLANET Networking & Communication

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User's Manual

www.PLANET.com.tw

8-Port 10/100/1000T 802.3at PoE + 2-Port 2.5G 802.3at PoE + 1-Port 10G SFP+ Ethernet Switch

GSD-1121XP

PLANET Technology Corp.
10F., No. 96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan
2351-AK3350-000

Warning:
This device is compliant with Class A of CISPR 32.
In a residential environment this device may cause radio interference.

Energy Saving Note of the Device
This power required device does not support Standby mode operation. For energy savings, please remove the power cable to disconnect the device from the power circuit. Without removing the power cable, the device will still consume power from the power source. In view of Saving the Energy and reducing the unnecessary power consumption, it is strongly suggested to remove the power cable from the device if this device is not intended to be active.

1. Before we connect the 802.3at PoE+ Switch to the other network device, we have to make sure both sides of the SFP+ transceivers are with the same media type, for example, 10GBASE-SR to 10GBASE-SR; 10GBASE-LR to 10GBASE-LR.
2. Check whether the fiber-optic cable type matches with the SFP+ transceiver requirement.
   - To connect to 10GBASE-SR SFP+ transceiver, please use the multi-mode fiber cable with one side being the male duplex LC connector type.
   - To connect to 1000BASE-LR SFP+ transceiver, please use the single-mode fiber cable with one side being the male duplex LC connector type.

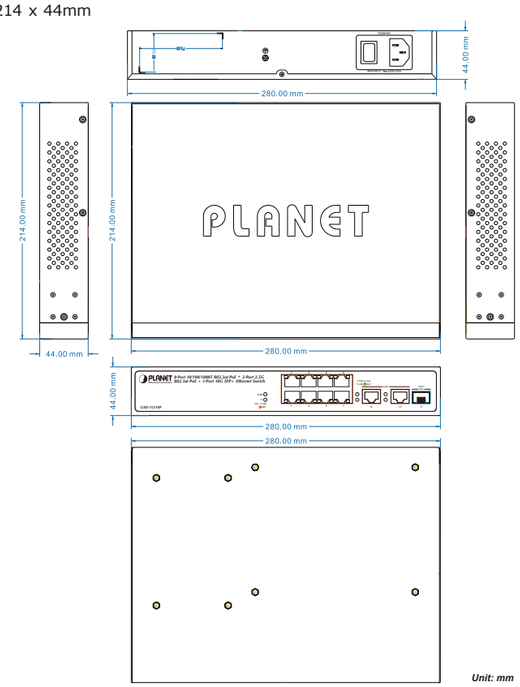
4. Product Specifications

Model	GSD-1121XP
Hardware Specifications	
Copper Ports	8 x 10/100/1000BASE-T RJ45 2 x 100/1G/2.5GBASE-T RJ45 ■ With 802.3at/af PoE+ injector function ■ Auto-MDI/MDI-X, auto-negotiation
SFP+ Port	1 x 10GBASE-X SFP+ interface
ESD Protection	6KV contact/8KV air
EFT Protection	1KV
Installation	Desktop or rack-mount installation
Dimensions (W x D x H)	280 x 214 x 44mm

Power over Ethernet	
PoE Standard	IEEE 802.3at/af PoE Plus, PSE
PoE Power Supply Type	End-span
PoE Power Output	Per port 52V DC, max. 30 watts
Power Pin Assignment	1/2 (+), 3/6 (-)
PoE Power Budget	120 watts
Standards Conformance	
Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3ae 10Gb/s Ethernet IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus IEEE 802.3x Full-Duplex Flow Control IEEE 802.3az EEE (Energy Efficient Ethernet) IEEE 802.3bz 2.5G BASE-T
Regulatory Compliance	FCC Part 15 Class B, CE
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)

5. Physical Dimensions

The GSD-1121XP 802.3at PoE+ Switch dimensions (W x D x H): 280 x 214 x 44mm



6. Customer Support

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

PLANET online FAQs:
http://www.planet.com.tw/en/support/faq.php

Support team mail address:
support@planet.com.tw