1. Package Contents

Check the following contents of your package:

GSD-504HP	User's Manual	Rubber Feet x 4
		
55V Power Adapter	Power Cord	
		

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

➢ **RJ45 Interface**

- 5 10/100/1000BASE-T RJ45 ports

➢ **Power over Ethernet**

- Complies with IEEE 802.3af/at/bt Power over Ethernet end-span PSE
- 2 ports for IEEE 802.3bt PDs and 2 ports for IEEE 8020.3af/at PDs
- Supports PoE power up to 90 watts for PoE port 1 to port 2, 30 watts for PoE port 3 to port4
- Each port supports 55V DC power to PoE PD
- 120-watt PoE budget
- Auto detects PD
- Circuit protection prevents power interference between ports
- Supports PoE in Standard and Legacy mode

➢ **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 2K absolute MAC addresses
- Automatic address learning and address aging

➢ **Hardware**

- LED indicators for PoE ready/activity and LINK/ACT
- One 55V DC power jack
- Fanless design

3. Switch Front Panel

Figure 3-1 shows the front panel of the PoE Switch.

Figure 3-1: Front Panel

4. LED Indicators

■ System

LED	Color	Function
PWR	Orange	**Lights:** Indicates the Switch has power. **The LED is shown on Port 5**

■ Per 10/100/1000Mbps Port

LED	Color	Function
LNK	Green	**Lights:** Indicates the link through that port is successfully established at 10/10/1000Mbps. **Blinks:** Indicates that the Switch is actively sending or receiving data over that port.

■ PoE-in-Use Port

LED	Color	Function
PWR	Orange	**Lights:** Indicates the port is providing 55V DC in-line power.

5. Switch Rear Panel

Figure 5-1 shows the rear panel of the PoE Switch.

Figure 5-1: 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-504UP from being damaged by unregulated surge or current to the GSD-504UP or the power adapter.

6. DIP Switch

Standard/Legacy Mode

Standard	To provide power to the PD devices those follow the IEEE 802.3af/at/bt standard.
Legacy	To provide power to the PD devices those do not fully follow the IEEE802.3af/at/bt standard. Besides, the Legacy mode supports PoH and Ultra PoE.

7. Installing the Switch

This part describes how to install your PoE Switch and make connections to it. Please follow the procedures:

Desktop Installation

To install the PoE Switch on desktop, simply follow the following steps:

Step 1: Attach the rubber feet to the recessed areas on the bottom of the PoE Switch.

Step 2: Place the PoE Switch on desktop near AC power source for its power adapter.

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

Note

When choosing a location, please keep in mind the environmental restrictions discussed in Chapter 8 -- Product Specifications.

Step 4: Connect your PoE Switch to network devices.

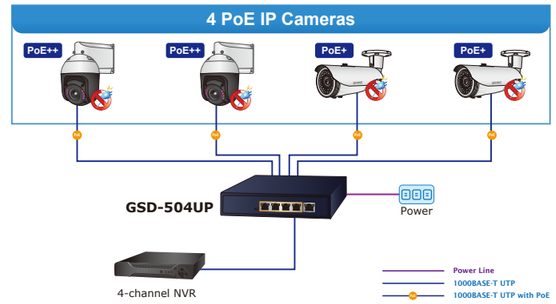
A. Connect one end of a standard network cable to RJ45 port 5 on the front panel of the PoE Switch.

B. Connect the other end of the cable to a network device, such as NVR, workstation or router.

Step 5: Connect your PoE Switch to PoE PD devices.

A. Connect one end of a standard network cable to an RJ45 port (Choose from ports 1 to 4) on the front panel of the PoE Switch.

B. Connect the other end of the cable to an 802.3af/at/bt PD.



Note

Cable Distance for Switch
The cable distance between the GSD-504UP and PC/PD devices should not exceed 100 meters for UTP/STP cable.

Note

Make sure the wiring is correct
Category 3/4/5 cable can be used for 10/100Mbps operation. To reliably operate your network at 1000Mbps, you must use an unshielded twisted-pair (UTP) Category 5/5e cable, or better data grade cabling. While a Category 3 or 4 cable may initially seem to work, it will soon cause data loss.

Step 6: Supply power to the PoE Switch.

A. Connect one end of the power core to the Switch.

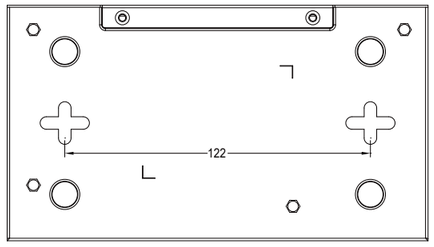
B. Connect the power plug to a standard wall outlet.

When the PoE Switch receives power, the power LED should remain solid orange.

Wall-mounted installation

Step 1: Find the wall that you want the GSD-504UP to be mounted on.

Step 2: Please refer to the picture below and screw the two screws into the marked areas of the wall.



Step 3: Hang the GSD-504UP on the screws from the wall.

Step 4: Repeat step 6 for the desktop Installation of the power supply to the GSD-504UP.

Note	Before mounting the device to the wall, please check the location of the electrical outlet and the length of the Ethernet cable.

Power Requirements	55V DC, 2.8A
Surge Protection	Difference Mode: ±4KV; Common mode: ±6KV
ESD Protection	Contact 4KV; air 6KV
Power Consumption	Max. 136 watts, 464.05 BTU
Dimensions (W x D x H)	168 x 93 x 32 mm
Weight	414g
Power over Ethernet	
PoE Standard	IEEE 802.3at Power over Ethernet Plus/PSE IEEE 802.3bt Power over Ethernet Plus Plus/PSE
PoE Power Supply Type	Port 1-2: End-span + Mid-span Port 3-4: End-span
Power Pin Assignment	Port 1-2: 4 pairs 1/2 (-), 3/6 (+) and 4/5 (+), 7/8 (-) Port 3-4: 2 pairs 1/2 (-), 3/6 (+)
PoE Power Output	Port 1-2: 90W max.; Port 3-4: 30W max.
Total PoE Power Budget	120 watts

PLANET Networking & Communication

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User's Manual

www.PLANET.com.tw

2-Port 10/100/1000T 802.3bt PoE + 2-Port 10/100/1000T 802.3at PoE + 1-Port Gigabit Desktop Switch

GSD-504UP

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

2351-AK3320-000

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 DC plug or slide the hardware-based Power Switch to the OFF position to disconnect the device from the power circuit. Without removing the DC plug from or switching off the device, 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 power off or to remove the DC plug from the device if this device is not intended to be active.

8. Product Specifications

Model	GSD-504UP 2-Port 10/100/1000T 802.3bt PoE + 2-Port 10/100/1000T 802.3at PoE + 1-Port Gigabit Desktop Switch
Hardware Specifications	
Network Connector	5 10/100/1000BASE-T RJ45 auto MDI/MDIX ports
PoE Inject Port	2 ports with 802.3bt PoE++ injector function (Ports 1 to 2) 2 ports with 802.3af/at PoE+ injector function (Ports 3 to 4)
LED Display	System: PWR (Orange) Per PoE port: PoE (Orange, port 1 to port 4) Ethernet port: LNK (Green)
Thermal Fan	Fanless design
Switch Architecture	Store and Forward
MAC Address Table	2K MAC address table with auto learning function
Switch Fabric	10Gbps
Switch Throughput	7.44Mpps @64 bytes
Jumbo Packet	9K bytes
Flow Control	Back pressure for half duplex. IEEE 802.3x pause frame for full duplex

Standard Conformance	
EMI Safety	FCC Part 15 Class A, CE
Standard Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab Gigabit 1000BASE-T IEEE 802.3x Flow Control and Back Pressure IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus IEEE 802.3bt Power over Ethernet Plus Plus
Environment	
Operating Environment	0 ~ 50 degrees C
Storage Environment	-10 ~ 70 degrees C
Operating Humidity	5 ~ 95%, relative humidity, non-condensing
Storage Humidity	5 ~ 95%, relative humidity, non-condensing

9 Customer Support

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

PLANET online FAQs:
https://www.planet.com.tw/en/support/faq?method=category&c1=1

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

FCC Warning

This device has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the Instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense

CE Mark Warning

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

WEEE Warning

To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.