## 1. Package Content

Thank you for purchasing PLANET 16/24-Port 10/100/1000Mbps unmanaged Gigabit Ethernet Switch, GSW-1601 / GSW-2401. Terms of "Switch" in following section of this User's Manual means the GSW-1601 / GSW-2401.

Upon open the box of the Switch and carefully unpack it. The box should contain the following items:

- $\bullet\,$  The Gigabit Ethernet Switch x 1
- User's manual x 1
- Power Cord x 1
- Rubber feet x 4
- Two rack-mounting brackets with attachment screws x1

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 against to repack the product in case there is a need to return it to us for repair.

# 3. Product Specification

| Product                               | GSW-1601                                                                  | GSW-2401             |
|---------------------------------------|---------------------------------------------------------------------------|----------------------|
| Hardware Specification                |                                                                           |                      |
| 10/100/1000Base-<br>T MDI/MDIX Ports  | 16                                                                        | 24                   |
| Throughput<br>(packet per<br>second)  | 23.8Mpps                                                                  | 35.7Mpps             |
| Switch fabric                         | 32Gbps                                                                    | 48Gbps               |
| Weight                                | 2.30kg                                                                    | 2.44kg               |
| Power<br>Consumption /<br>Dissipation | 13 watts / 44<br>BTU                                                      | 18 watts / 61<br>BTU |
| Power<br>Requirement                  | 100~240V AC, 0.6A, 50-60 Hz                                               |                      |
| Dimensions<br>(W x D x H)             | 440 x 180 x 45mm, 1U height                                               |                      |
| Switch Processing<br>Scheme           | Store-and-Forward                                                         |                      |
| Address Table                         | 8K entries                                                                |                      |
| Jumbo packet size                     | 9К                                                                        |                      |
| Flow Control                          | Back pressure for half duplex, IEEE<br>802.3x Pause Frame for full duplex |                      |

## 4. Switch Front Panel

Figure 1 & 2 shows a front panel of Gigabit Ethernet Switch.

#### 

Figure 1: GSW-1601 front panel

### 

Figure 2: GSW-2401 front panel

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## 2. Product Features

• Comply with IEEE 802.3, 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T Ethernet standard

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- 16 / 24-Port 10/100/1000Mbps Gigabit Ethernet ports
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- Hardware based 10/100Mbps, half / full duplex and 1000Mbps full duplex mode, flow control and auto-nego-tiation
- IEEE 802.3x flow control for full duplex operation and Backpressure for half duplex operation
- Integrated address look-up engine, support 8K absolute MAC addresses
- 9K Jumbo packet support
- Automatic address learning and address aging
- Supports Auto MDI/MDI-X function
- Support CSMA/CD protocol
- 100~240VAC, 0.6A, 50~60Hz universal Power input
- FCC, CE class A compliant

| Temperature              | Operating: 0~50 Degree C<br>Storage -40~70 Degree                                                                                 |  |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--|
| Humidity<br>Operating    | 5% to 90%, Storage: 5% to 90%<br>(Non-condensing)                                                                                 |  |
| Standards Conformance    |                                                                                                                                   |  |
| Regulation<br>Compliance | FCC Part 15 Class A, CE                                                                                                           |  |
| Standards<br>Compliance  | IEEE 802.3 (Ethernet)<br>IEEE 802.3u (Fast Ethernet)<br>IEEE 802.3ab (Gigabit Ethernet)<br>IEEE 802.3x (Full-duplex flow control) |  |

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## **LED** Indicators

GSW-1601 / GSW-2401

System

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

#### Per 10/100/1000Mbps port

| LED          | Color | Function                                                                                                                                                                     |  |
|--------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| lnk /<br>Act | Green | Lights to indicate the link through that<br>port is established successfully.<br>Blinks indicate that the Switch is<br>actively sending or receiving data over<br>that port. |  |
| 1000         | Green | Lights to indicate the port is run at 1000Mbps.<br>Off: indicate that the port is operating at 10/100Mbps.                                                                   |  |

# 5. Switch Rear Panel

Figure 3 shows a front panel of Gigabit Ethernet Switch.



Figure 3: GSW-1601 / GSW-2401 rear panel

The device is a power-required device, it means, it will not work till it is powered. If your networks should 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.
In some area, installing a surge suppression device may also help to protect your Gigabit Ethernet Switch from being damaged by unregulated surge or current to the Switch or the power adapter.

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# 6. Installing the Switch

This part describes how to install your Gigabit Ethernet Switch and make connections to it. Please read the following topics and perform the procedures in the order being presented.



This Gigabit Ethernet Switch does not need software configuration.

## **Desktop Installation**

To install the Gigabit Ethernet Switch on desktop, simply follow the next steps:

- **Step 1:** Attach the rubber feet to the recessed areas on the bottom of the Gigabit Ethernet Switch.
- **Step 2:** Place the Gigabit Ethernet Switch on desktop near an AC power source.
- **Step 3:** Keep enough ventilation space between the Gigabit Ethernet Switch and the surrounding objects.



When choosing a location, please keep in mind the environmental restrictions discussed in Section 3 Product Specifications.

- **Step 4:** Connect your Gigabit Ethernet Switch to network devices.
  - A. Connect one end of a standard network cable to the 10/100/1000 RJ-45 ports on the front of the Gigabit Ethernet Switch.
  - B. Connect the other end of the cable to the network devices such as printer servers, workstations or routers...etc.
- **Step 5:** Supply power to the Gigabit Ethernet Switch.
  - A. Connect one end of the power cable to the Gigabit Ethernet Switch.
  - B. Connect the power plug of the power cable to a standard wall outlet.

When the Gigabit Ethernet Switch receives power, the Power LED should remain solid Green.





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Figure 5: Mounting the Gigabit Ethernet Switch in a Rack

**Step 6:** Proceeds with the steps 4 and steps 5 of Desktop Installation to connect the network cabling and supply power to your Gigabit Ethernet Switch.



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## **Rack Mounting**

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

- **Step 1:** Place your Gigabit Ethernet 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 4 shows how to attach brackets to one side of the Gigabit Ethernet Switch.



Figure 4: Attaching the brackets to the Gigabit Ethernet Switch



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

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

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

## **Customer Support**

Thank you for purchase PLANET products. You can browse our online FAQ resource at the PLANET Web site first to check if it could solve you 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

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# 16/24-Port Gigabit Ethernet Switch



For GSW-1601 / GSW-2401

1000Mbps

**GSW-Series** 

**User's Manual**