# 1. Package Contents

Thank you for purchasing PLANET 16/24-Port 10/100/1000Base-T unmanaged Gigabit Ethernet Switch, GSW-1601 / GSW-2401. **"Switch"** mentioned in this User's Manual refers to the GSW-1601 / GSW-2401.

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

- 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 x 8

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

- 16 / 24-Port 10/100/1000Base-T Gigabit Ethernet ports
- Supports auto MDI/MDI-X function

### Layer 2 Features

- Complies with IEEE 802.3, 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T Ethernet standards
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- Integrated address look-up engine, supporting 8K absolute MAC addresses
- 9K Jumbo packet support
- IEEE 802.1Q VLAN packet transparent support
- IEEE 802.3x flow control for full duplex operation and backpressure for half duplex operation
- Hardware based 10/100Base-TX, half / full duplex and 1000Base-T full duplex mode, flow control and auto-negotiation
- Automatic address learning and address aging
- Supports CSMA/CD protocol

### Hardware Features

- 100~240V AC, 0.3A, 50~60Hz universal power input (GSW-1601)
- 100~240V AC, 0.5A, 50~60Hz universal power input (GSW-2401)
- FCC, CE class A compliant



# 3. Product Specifications

| Product | GSW-1601 | GSW-2401 |
|---|---|---|
| Hardware Specifications | | |
| Hardware Version | 6 | |
| 10/100/1000Base-T MDI/MDIX Ports | 16 | 24 |
| Throughput (packet per second) | 23.8Mpps | 35.7Mpps |
| Switch Fabric | 32Gbps | 48Gbps |
| Weight | 1.9kg | 2kg |
| Power Consumption / Dissipation | 12 watts / 40 BTU | 14 watts / 47 BTU |
| Power Requirements | 100~240V AC, 0.3A, 50-60Hz | 100~240V AC, 0.5A, 50-60Hz |
| Dimensions (W x D x H) | 440 x 180 x 44mm, 1U height | |
| Switch Processing Scheme | Store-and-Forward | |
| Address Table | 8K entries | |
| Jumbo Packet Size | 9K | |
| Flow Control | Back pressure for half duplex, IEEE 802.3x Pause Frame for full duplex | |
| Temperature | Operating: 0~50 degree C<br>Storage: -10~70 degree C | |
| Humidity | Operating: 5% to 95% (non-condensing)<br>Storage: 5% to 95% (non-condensing) | |
| Standards Conformance | | |
| Regulation Compliance | FCC Part 15 Class A, CE | |
| Standards 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) | |



# 4. Switch Front Panel

Figures **1 & 2** show the front panels of the GSW-1601 and GSW-2401.


**Figure 1:** GSW-1601 Front Panel


**Figure 2:** GSW-2401 Front Panel



# 5. Switch Rear Panel

Figures **3 & 4** show the rear panels of the GSW-1601 and GSW-2401.

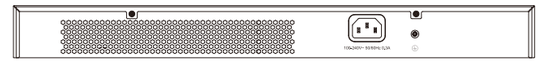

**Figure 3:** GSW-1601 Rear Panel

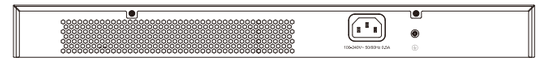

**Figure 4:** GSW-2401 Rear Panel

Power Notice

1. The device is a power-required device, meaning it will not work till it is powered. If your network 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 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.



## LED Indicators

**GSW-1601 / GSW-2401**

**System**

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

**Per 10/100/1000Base-T Port**

| LED | Color | Function |
|---|---|---|
| LNK / ACT | Green | Lights to indicate the link through that port is established successfully.<br>Blinks to indicate that the Switch is actively sending or receiving data over that port. |
| 1000 | Green | Lights to indicate the port is running at 1000Mbps.<br>When off, it indicates that the port is operating at 10/100Mbps. |



# 6. Installing the Switch

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

Note

This Gigabit Ethernet Switch does not need software configuration.

### Desktop Installation

To install the Gigabit Ethernet Switch on the desktop, simply follow these 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 the desktop near an AC power source.

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

Note

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

**Step 4:** Connect your Gigabit Ethernet Switch to network devices.

**A.** Connect one end of a standard network cable to the 10/100/1000Base-T 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.

## 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 **5** shows how to attach brackets to one side of the Gigabit Ethernet Switch.

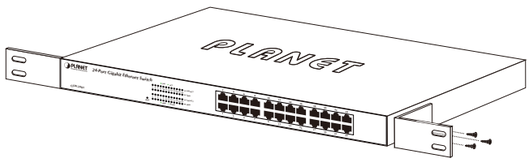

Figure 5: Attaching the brackets to the Gigabit Ethernet Switch

> **Caution**
>
> 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.



**Step 5:** After the brackets are attached to the Gigabit Ethernet Switch, use suitable screws to securely attach the brackets to the rack, as shown in Figure 6.

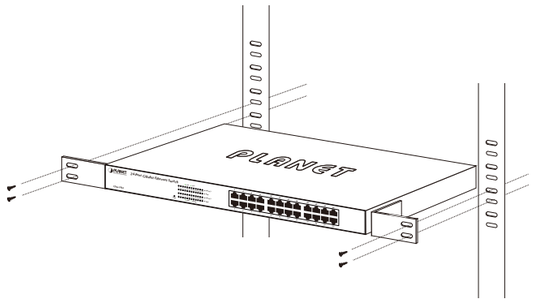

**Figure 6:** Mounting the Gigabit Ethernet Switch in a Rack

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



# 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 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





PLANET Technology Corp.
2011-A50140-003

User's Manual

# Gigabit Switch

GSW-1601/GSW-2401

www.PLANET.com.tw

16/24-Port Gigabit Ethernet Switch

Auto Negotiation | 10M/100M 1000M | Jumbo FRAME | Auto MDI/MDI-X | Plug & Play | Metal Shape

**EC Declaration of Conformity**

For the following equipment:

*Type of Product : 16/24 -Port 10/100/1000T Gigabit Ethernet Switch
*Model Number : GSW-1601, GSW-2401

* 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 (2004/108/EC).
For the evaluation regarding the EMC, the following standards were applied:

| | |
|---|---|
| EN 55022 | (CLASS A, 2010 / AC:2011) |
| EN 61000-3-2 | (2006 + A1:2009 +A2:2009) |
| EN 61000-3-3 | (2008) |
| EN 55024 | (2010) |
| IEC 61000-4-2 | (2008) |
| IEC 61000-4-3 | (2006+A1:2007+A2:2010) |
| IEC 61000-4-4 | (2012) |
| IEC 61000-4-5 | (2005) |
| IEC 61000-4-6 | (2013) |
| IEC 61000-4-8 | (2009) |
| IEC 61000-4-11 | (2004) |
| EN 60950-1 | (2006+A11:2009+A1:2010+A12:2011) |

**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 :** **Product Manager**

Taiwan (*Place*) 19 Sep., 2014 (*Date*) (*Legal Signature*)

**PLANET TECHNOLOGY CORPORATION**
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