

# 16-Port 10/100/1000BASE-T Gigabit Ethernet Switch



## Cost-effective Gigabit Solution for Enterprise Backbone and Data Center Networking

PLANET GSW-1601 Gigabit Ethernet Switch provides 16 RJ45 10/100/1000Mbps ports for high-speed network connectivity. It can automatically identify and determine the correct transmission speed and half/full duplex mode of the attached devices with its 16 Gigabit ports that support 10K jumbo frame feature. Therefore, the GSW-1601 can handle extremely large amounts of data transmission in a secure topology linking to a backbone or high-power servers.

#### High Performance

The GSW-1601 provides a high-performance switch architecture that is capable of providing the non-blocking switch fabric and wire-speed throughput as high as 32Gbps, which greatly simplifies the tasks of upgrading the LAN for catering to increasing bandwidth demands. Besides, the Flow Control function of the GSW-1601 enables routers and servers to directly connect to the Switch for fast and reliable data transfer. All the RJ45 copper interfaces of the GSW-1601 support 10/100/1000Mbps autonegotiation for optimal speed detection through RJ45 Category 6, 5 or 5e cables. It also supports standard for auto-MDI/MDI-X that can detect the type of connection to any Ethernet device without requiring special straight or crossover cables.

#### **Excellent Traffic Transmission**

The GSW-1601 supports Store-and-Forward forwarding scheme to ensure low latency and high data integrity, which eliminates unnecessary traffic and relieves congestion on critical network paths. With an intelligent address recognition algorithm, the GSW-1601 recognizes up to 8K different MAC addresses. The high data throughput and 32Gbps internal switching fabric make it ideal for most Gigabit environments, especially when network is upgraded to a Gigabit environment.

#### Fanless Design

With its good ventilation design, the GSW-1601 is able to operate all along without a fan, thus reducing substantial power consumption and creating a noiseless environment. The GSW-1601 is definitely the best choice for any working environment without affecting its performance.



### **Physical Port**

- 16 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
- · 10K jumbo packet support
- · Power Saving ability for Green networking
- IEEE 802.1Q VLAN packet transparency 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 autonegotiation
- · Automatic address learning and address aging
- · Supports CSMA/CD protocol

#### **Hardware Features**

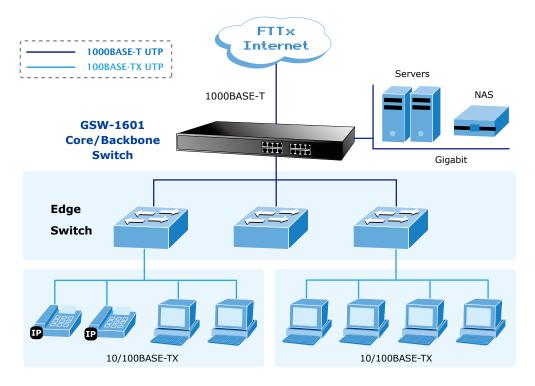
- 100~240V AC, 0.3A, 50~60Hz universal power input
- · FCC, CE Class A compliant



# **Applications**

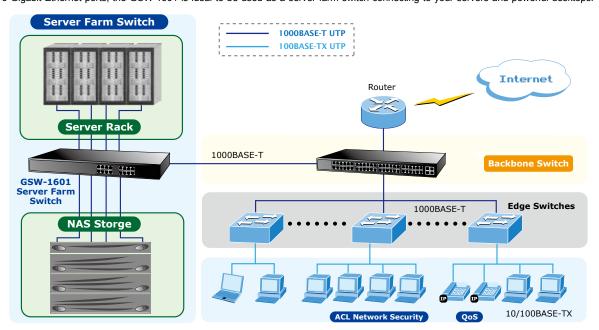
#### Backbone Switch

With up to 32 Gigabits per second of non-blocking switch fabric, the GSW-1601 can easily provide high bandwidth for both today's and future requirements.



### Server Farm Switch

Providing 16 Gigabit Ethernet ports, the GSW-1601 is ideal to be used as a server farm switch connecting to your servers and powerful desktops.





# **Specifications**

Deadwat	OOW 4004
Product	GSW-1601
Hardware Specifications	
Hardware Version	Version 7
10/100/1000BASE-T MDI/MDIX Ports	16
Throughput (packet per second)	23.8Mpps
Switch Fabric	32Gbps/non-blocking
Weight	1.8kg
Power Consumption/Dissipation	8.9 watts/30 BTU
Power Requirements	100-240V AC, 0.3A, 50/60Hz
Dimensions (W x D x H)	440 x 180 x 44 mm, 1U height
Switch Processing Scheme	Store-and-Forward
Address Table	8K entries
Jumbo Packet Size	10K
Flow Control	Back pressure for half duplex, IEEE 802.3x pause frame for full duplex
Standards Conformance	
Regulatory Compliance	FCC Part 15 Class A, CE
Standard Compliance	IEEE 802.3 (Ethernet) IEEE 802.3u (Fast Ethernet) IEEE 802.3ab (Gigabit Ethernet) IEEE 802.3x (Full-duplex flow control)
Environmental Specifications	
Temperature	Operating: 0~50 degrees C Storage: -10~70 degrees C
Humidity	Operating: 5~95 degrees C Storage: 5~95 degrees C (non-condensing)

<sup>\*</sup> The specification is for GSW-1601 hardware version 7 only.

# **Ordering Information**

nernet Switch	16-port 10/100
---------------	----------------

Tel: 886-2-2219-9518 Email: sales@planet.com.tw Fax: 886-2-2219-9528 www.planet.com.tw

