

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



## Cost-effective Gigabit Solution for SOHO and Department Networking

PLANET GSD-1603 Gigabit Ethernet Switch provides 16 RJ45 10/100/1000Mbps ports for high-speed network connectivity. It can automatically identify and determine the suitable transmission speed and half/full duplex mode of the attached devices with its 16 Gigabit ports that support 9K jumbo frame feature. Therefore, the GSD-1603 can handle extremely large amounts of data transmission in a secure topology linking to a backbone or high-power servers.



## Energy Saving

The GSD-1603 incorporates two advanced green networking technologies and is able to provide power saving up to 40% less energy but maintains high performance efficiently.

### (1) Hibernation Link Down power saving

The Hibernation Link Down power saving goes beyond IEEE specifications to automatically lower power consumption for a given port when it is not linked. With the Hibernation Link Down power saving technology, the GSD-1603 will automatically adjust power usage of the ports that are shut down or not connected to network device.

## Physical Port

- 16 10/100/1000BASE-T Gigabit Ethernet ports
- Supports auto MDI/MDI-X function

## Layer 2 Features

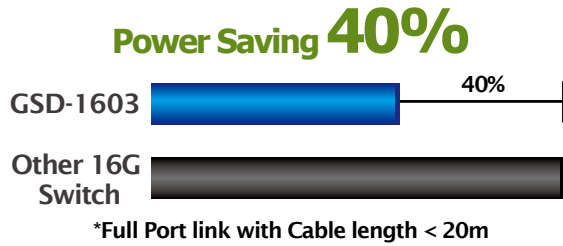
- Complies with IEEE 802.3, 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T Ethernet standards
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- Integrated address look-up engine, supporting 8K absolute MAC addresses
- 9K jumbo packet support
- IEEE 802.1Q VLAN 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

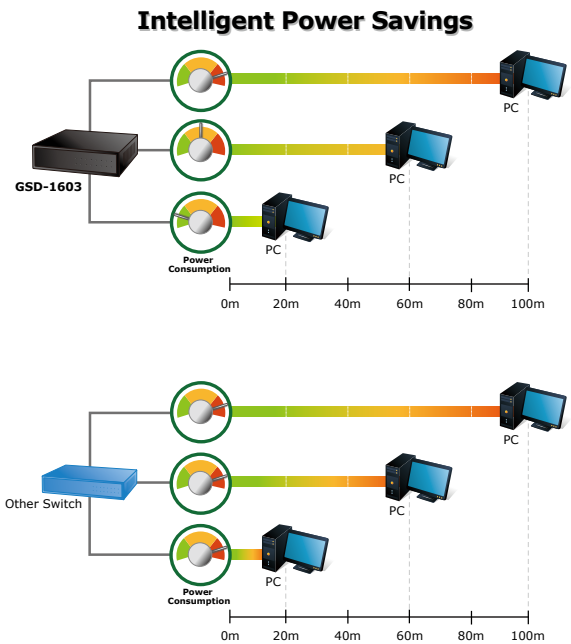
- Made of metal, desktop size and wall-mount design
- LED indicators for system power, per port Link/Act
- 12V DC, 1A external power adapter
- FCC, CE Class B compliant

**(2) Intelligent scales power based on cable length**

Intelligent scales power, the other technology adopted, is an intelligent algorithm that actively determines the appropriate power level based on cable length. When the GSD-1603 is connected with Ethernet cable shorter than 20m, a device can obtain maximum power saving because the GSD-1603 would automatically detect the Ethernet cable length and diminish power usage. The connected device can substantially reduce the overall power consumption, which makes a significant contribution to energy saving.



**Save  
52,560 Watts  
yearly**



**Stable and High Performance Switch Architecture**

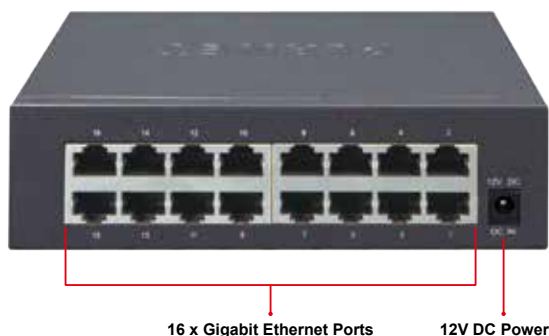
The GSD-1603 has an 8K MAC address table, featuring high performance switch architecture capable of providing the non-blocking 32Gbps switch fabric and wire-speed throughput as high as 23.8Mpps, which greatly simplifies the tasks of upgrading the LAN for catering to increasing bandwidth demands. Besides, the 802.3x full-duplex flow control function of the GSD-1603 enables routers and servers to be directly connected to the switch for wire-speed packet transfer performance without the risk of packet loss.

**Flexible Desktop Size and Fanless Design**

The GSD-1603 is the standard metal model to fit into a space-limited environment. Designed with compact size, fanless and noiseless features, the GSD-1603 is able to operate stably and quietly in any environment without affecting its performance.

**Plug & Play**

All RJ45 copper interfaces of the GSD-1603 support 10/100/1000Mbps auto-negotiation for optimal speed detection through RJ45 Category 5, 5e or 6 cables. They support standard auto-MDI/MDI-X feature which can detect the type of connection to any Ethernet device without requiring special straight-through or crossover cables.

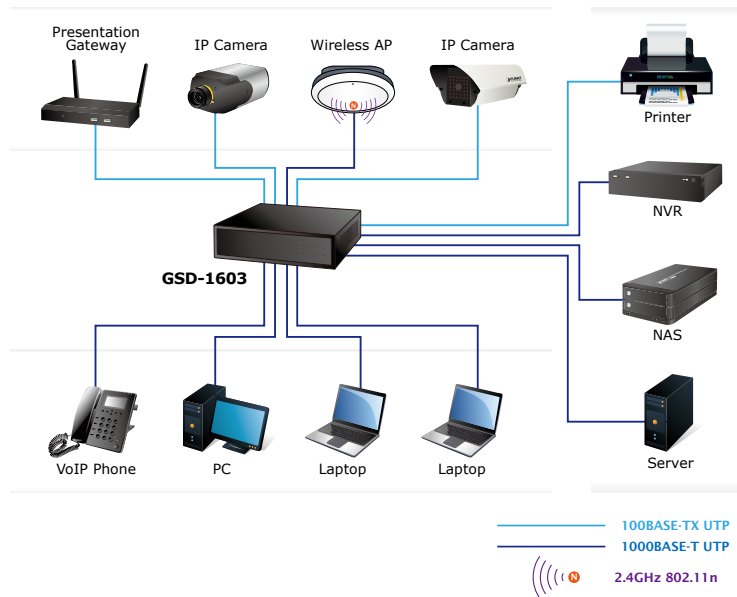


## Applications

### Home/SOHO Gigabit High-speed Smaller Network

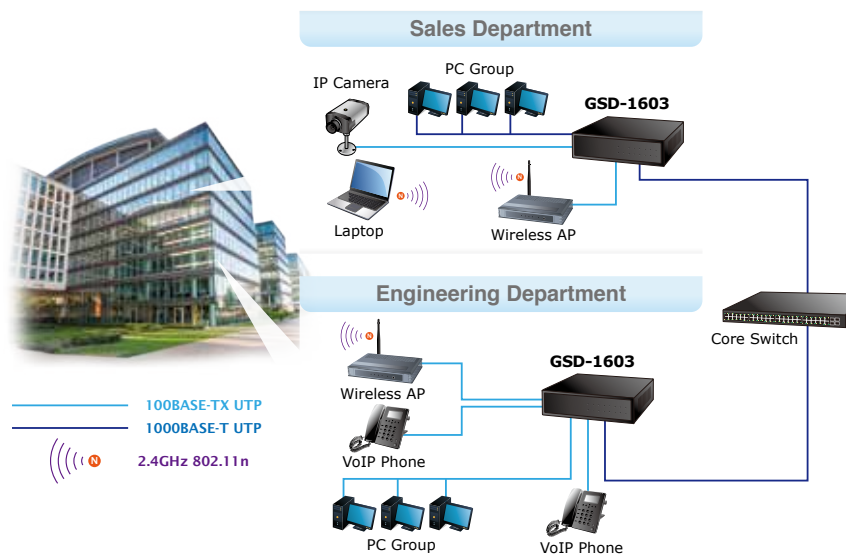
With up to 32 Gigabits per second of non-blocking switch fabric, the GSD-1603 Gigabit Ethernet Switch provides 16 Gigabit Ethernet Ports and is the best solution to the high-speed Internet environment demanded by SOHO/Home and Power users. The GSD-1603 accelerates the speed of data transmission between various Ethernet devices without worrying about the delay of high-quality multimedia display.

### Ideal for Small Networks



### IP Office Department/Workgroup Switch

The GSD-1603 Gigabit Ethernet Switch helps enterprises or users to deploy a Gigabit Ethernet integrated data, voice network or to build a high-bandwidth switched network quickly and easily. Based on uplink directly linked to the backbone switch over any straight-through or crossover cable, the GSD-1603 provides the connectivity to backplane yet segment the network traffic of the department to the core switch.



## Product Specifications

Product	GSD-1603
<b>Hardware Specifications</b>	
10/100/1000BASE-T Ports	16 auto MDI/MDIX RJ45 ports
LED Display	One for Power, one for Link/Act per port
Enclosure	Metal
Dimensions (W x D x H)	155 x 118 x 46 mm
Weight (g)	538g
Power Requirements (External power adapter)	12V DC, 1A
Power Consumption	10 watts/34 BTU
<b>Switch Specifications</b>	
Switch Processing Scheme	Store-and-Forward
Address Table	8K
Flow Control	Back pressure half duplex IEEE 802.3x pause frame full duplex
Switch Fabric	32Gbps
Throughput (packet per second)	23.8Mpps@64 bytes
Jumbo packet size	9K
<b>Standards Conformance</b>	
Standards Compliance	IEEE 802.3 (Ethernet) IEEE 802.3u (Fast Ethernet) IEEE 802.3ab (Gigabit Ethernet) IEEE 802.3x (Full-duplex Flow Control) IEEE 802.3az Energy Efficient Ethernet (EEE)
Regulatory Compliance	FCC Part 15 Class B, CE
<b>Environments</b>	
Temperature	Operating: 0~50 degrees C Storage: -10~70 degrees C
Humidity	Operating: 5~95% Storage: 5~95% (non-condensing)

## Ordering Information

GSD-1603	16-Port 10/100/1000BASE-T Desktop Metal Gigabit Ethernet Switch (External Power)
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## Related Products

GSD-503	5-Port 10/100/1000Mbps Gigabit Ethernet Switch(Metal)
GSD-504	5-Port 10/100/1000Mbps Gigabit Ethernet Switch(Plastic)
GSD-803	8-Port 10/100/1000Mbps Gigabit Ethernet Switch(Metal)
GSD-804	8-Port 10/100/1000Mbps Gigabit Ethernet Switch(Plastic)