

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.



Desktop-size Gigabit Switch for the Internet of things Infrastructure
16-Port 10/100/1000BASE-T Desktop Gigabit Ethernet Switch

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 autonegotiation
- · Automatic address learning and address aging
- · Supports CSMA/CD protocol

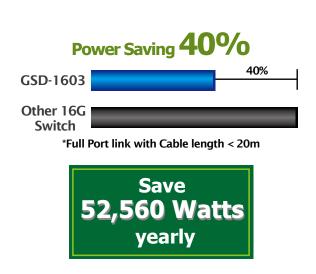
Hardware Features

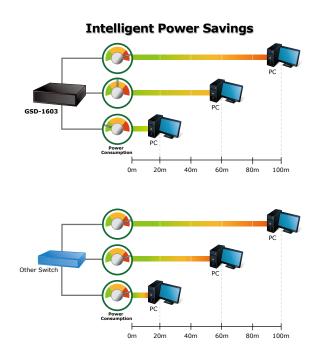
- · Made of metal, desktop size and wall-mount design
- LED indicators for system power, per port Link/Act
- 12V DC, 1A external power adapter
- · FCC, CE Class B compliant



(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.





Stable and High Performance Switch Architecture

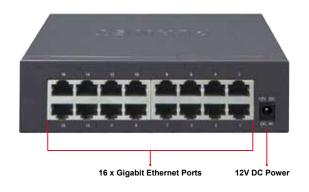
The GSD-1603 has an 8K MAC address table, featuring high performance switch architecture capable of providing the non-blocking 32Gbps switch fabric and wire-speed throughput as high as 23.8Mpps, which greatly simplifies the tasks of upgrading the LAN for catering to increasing bandwidth demands. Besides, 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.



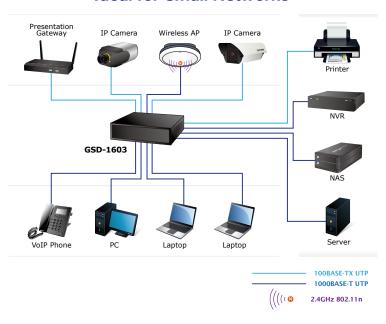


Applications

Home/SOHO Gigabit High-speed Smaller Network

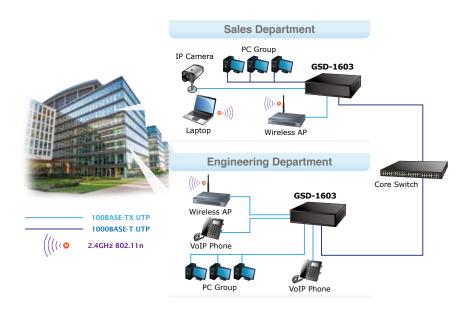
With up to 32 Gigabits per second of non-blocking switch fabric, the GSD-1603 Gigabit Ethernet Switch provides 16 Gigabit Ethernet Ports and is the best solution to the high-speed Internet environment demanded by SOHO/Home and Power users. The GSD-1603 accelerates the speed of data transmission between 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.



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Product Specifications

Product	GSD-1603
Hardware Specifications	
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
Switch Specifications	
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	9К
Standards Conformance	
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
Environments	
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)

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GSD-1603