

# 5-Port 10/100/1000T Gigabit Ethernet Switch



### Optimal Solution for Energy Saving and Gigabit High Performance

PLANET Green Networking Switch-GSD-504 is an ideal solution in line with the energy-saving trend worldwide. The GSD-504 is a 5-port Gigabit Ethernet Switch, bringing both benefits of energy saving and Gigabit wire speed performance. It is specially designed for home networking, SOHOs and enterprises.

### Energy Saving

The GSD-504 uses new engine that provides power saving up to 40% less energy but maintains high performance efficiently. It incorporates two advanced Green Networking technologies:

- Hibernation Link Down power saving
- Intelligent scales power based on cable length

The Hibernation Link Down power saving goes beyond IEEE specifications to automatically lower power for a given port when it is not linked. With the Hibernation Link Down power saving technology, the GSD-504 will automatically adjust power usage of the ports that are shut down or not connected to network device.

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-504 is connected with Ethernet cable shorter than 20m, a device can obtain maximum power saving because the GSD-504 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.

**Power Saving 40%**



\*Full Port link/Cable length < 20m

**Save  
22,776 Watts  
yearly**

### RJ-45 Interface

- Five 10/100/1000Mbps Gigabit Ethernet ports
- Complies with IEEE 802.3, 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T
- Supports auto MDI/MDI-X function

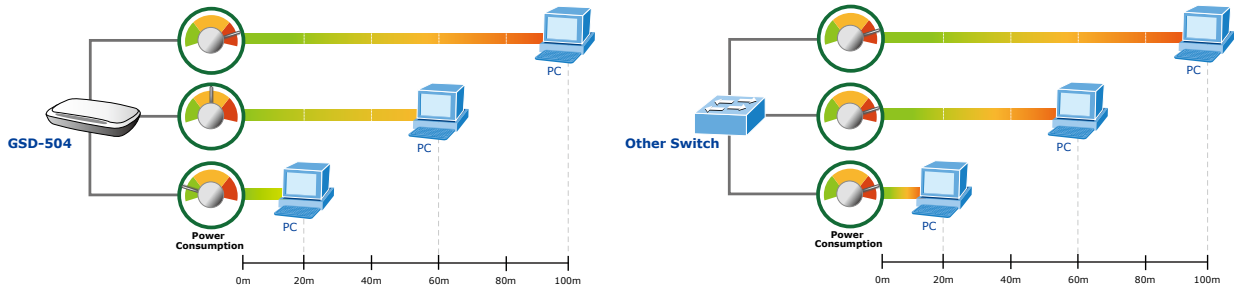
### Switching

- Hardware-based 10/100Mbps, half / full duplex and 1000Mbps full duplex mode, flow control and auto-negotiation
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- IEEE 802.3x flow control for full duplex operation and back pressure for half duplex operation
- Integrated address look-up engine, supporting 2K absolute MAC addresses
- 9K Jumbo packet size
- Power saving ability for Green networking
- Automatic address learning and address aging
- Supports CSMA/CD protocol

### Hardware

- Made from plastic, desktop size and wall-mount design
- LED indicators for system power, per port Link / Act
- 5V DC, 1A external power adapter
- FCC, CE Class B compliant

### Intelligent Power Savings

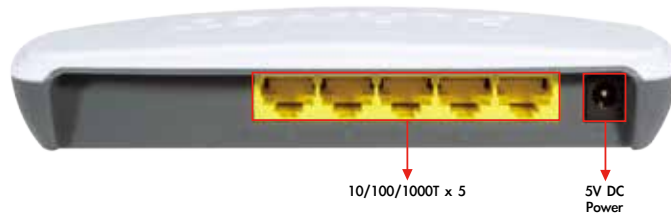


### Leading Home, SOHO and Workgroup Users to High-speed Networking Generation

The GSD-504 is designed with modern plastic compact housing and easy to deploy high speed Gigabit networking in home or SOHO applications. Providing 10Gbps internal switching fabric, the GSD-504 can handle an extremely large amount of data in a secure topology linking to a backbone or high capacity servers. The GSD-504 provides 2K MAC address table, and wire-speed packet transfer performance without risk of packet loss. The high data throughput of the device makes it ideal for most Gigabit environments, especially for the network to be upgraded to a Gigabit environment.

### Plug & Play

All RJ-45 copper interfaces of the GSD-504 support 10/100/1000Mbps auto-negotiation for optimal speed detection through RJ-45 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 or crossover cables.



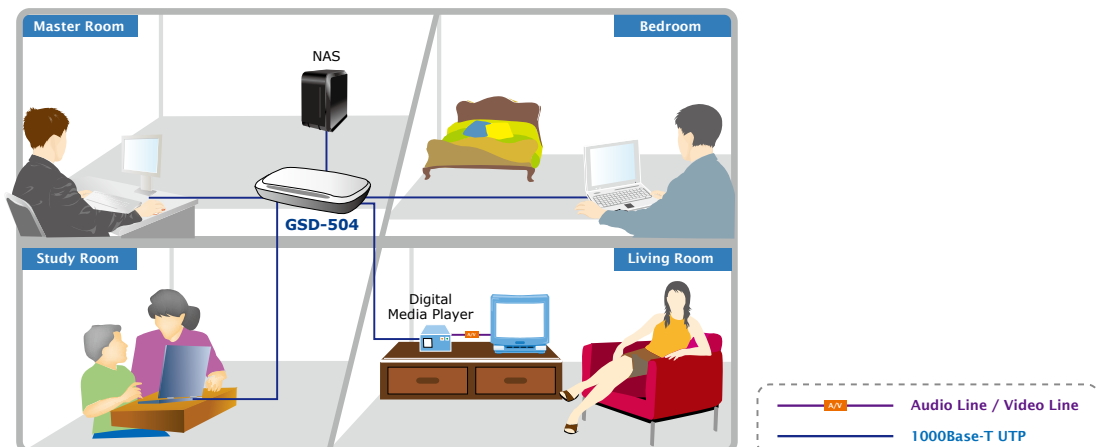
## Product Application

### Backbone Switch

The GSD-504 can directly connect to department Switches or backbone servers. With up to 10 Gigabit per second of non-blocking switch fabric, the GSD-504 can be used to build a Gigabit high-bandwidth switched network quickly and easily.

### Home/SOHO High-speed Network Center

The GSD-504 Gigabit Ethernet Switch provides the best solution of high-speed Internet environment demanded by SOHO / Home and Power users. The GSD-504 accelerates the speed of data transmission between devices without worrying about the delay of high quality multimedia display. In aspect of home use, the GSD-504 integrates the speeds of 10, 100 and 1000Mbps which can fulfill your demands of transmitting high quality multimedia, games and other high speed Internet applications.



## Product Specifications

Product	GSD-504
<b>Hardware Specifications</b>	
Hardware Version	7
10/100/1000Base-T Ports	5 auto MDI/MDIX ports
LED Display	One for Power, One for Link / Act per port
Enclosure	Plastic
Dimensions (W x D x H)	168 x 100 x 29mm
Weight (g)	138g
Power Requirements (External Power Adapter)	5V DC, 1A
Power Consumption (100M Full Operation)	3.3 watts / 11 BTU
<b>Switch Specifications</b>	
Switch Processing Scheme	Store-and-Forward
Address Table	2K
Flow Control	Back pressure half duplex IEEE 802.3x pause frame full duplex
Switch Fabric	10Gbps
Throughput (packet per second)	7.44Mpps
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)
Regulation 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-504	5-Port 10/100/1000T Gigabit Ethernet Switch (Plastic case)
---------	--

## Related Products

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