

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



## Optimal Solution for Energy Saving and Gigabit High Performance

PLANET GSD-804 Green Networking Switch is an ideal solution in line with the energy-saving trend worldwide. The GSD-804 is an 8-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-804, incorporating two advanced Green Networking technologies, is able to provide power saving by up to 40% 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 for a given port when it is not linked. With the Hibernation Link Down power saving technology, the GSD-804 will automatically adjust power usage of the ports that are shut down or not connected to network device.

### (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-804 is connected with Ethernet cable shorter than 20m, a device can obtain maximum power saving because the GSD-804 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.

## RJ45 Interface

- 8 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 4K 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

**Power Saving 40%**

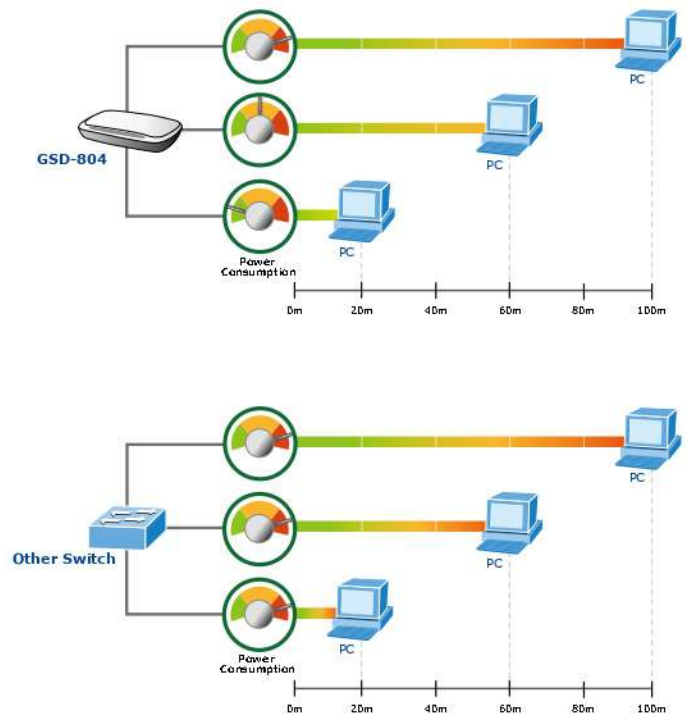
GSD-803  40%

Other 8G Switch 

\*Full Port link/Cable length < 20m

**Save  
26,280 Watts  
yearly**

### Intelligent Power Savings

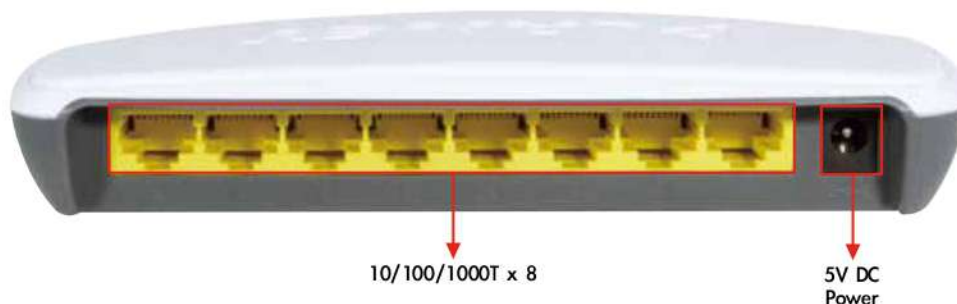


#### Leading Home, SOHO and Workgroup Users to High-speed Networking Generation

The GSD-804 is designed with modern compact plastic housing and easy for deployment of high speed Gigabit networking in home or SOHO applications. Providing 16Gbps internal switching fabric, the GSD-804 can handle an extremely large amount of data in a secure topology linking to a backbone or high capacity servers. The GSD-804 provides 4K 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 RJ45 copper interfaces of the GSD-804 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 or crossover cables.



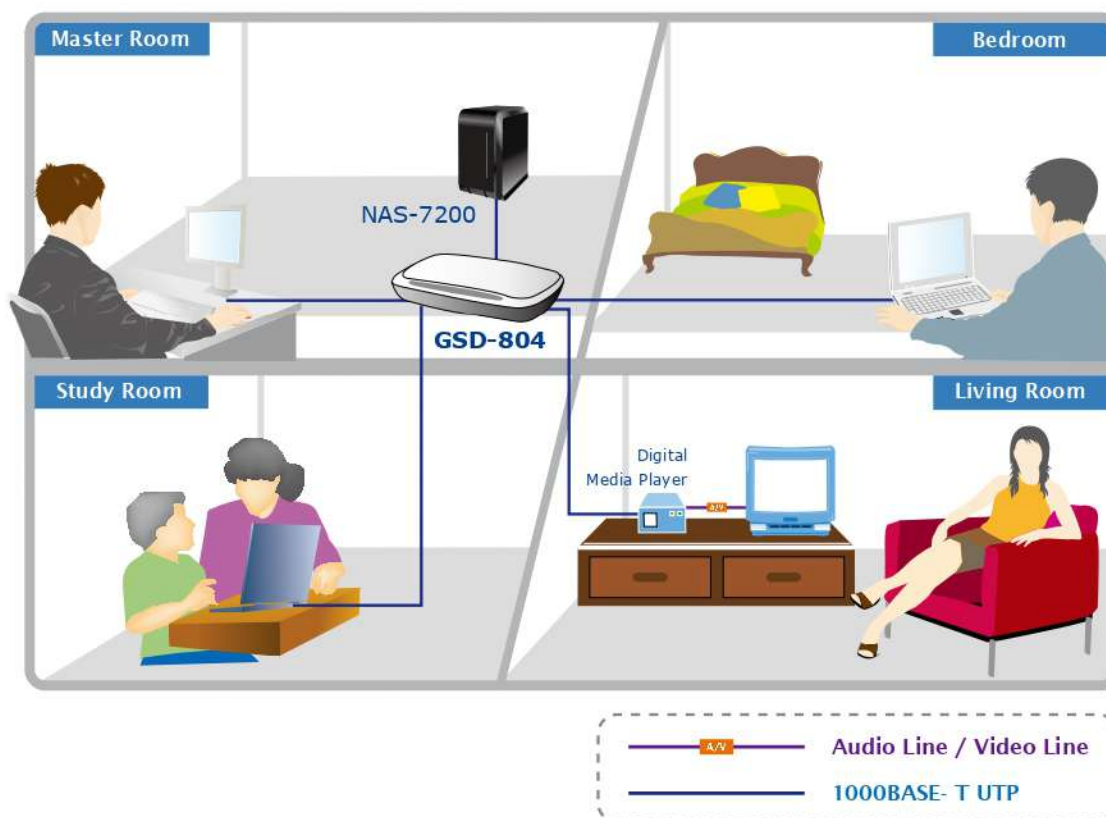
## Applications

### Backbone Switch

The GSD-804 can directly connect to department switches or backbone servers. With up to 16 Gigabit per second of non-blocking switch fabric, the GSD-804 can be used to build a Gigabit high-bandwidth switched network quickly and easily.

### Home/SOHO High-speed Network Center

The GSD-804 Gigabit Ethernet Switch provides the best solution of high-speed Internet environment demanded by SOHO / Home and Power users. The GSD-804 accelerates the speed of data transmission between devices without worrying about the delay of high-quality multimedia display. In the aspect of home use, the GSD-804 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.



## Specifications

|                                                |                                                                                                                                                                                   |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product                                        | GSD-804                                                                                                                                                                           |
| <b>Hardware Specifications</b>                 |                                                                                                                                                                                   |
| Hardware Version                               | 8                                                                                                                                                                                 |
| 10/100/1000BASE-T Ports                        | 8 auto MDI/MDIX ports                                                                                                                                                             |
| LED Display                                    | One for power and one for Link / Act per port                                                                                                                                     |
| Enclosure                                      | Plastic                                                                                                                                                                           |
| Dimensions (W x D x H)                         | 168 x 100 x 29 mm                                                                                                                                                                 |
| Weight (g)                                     | 175g                                                                                                                                                                              |
| Power Requirements<br>(External Power Adapter) | 5V DC, 1A                                                                                                                                                                         |
| Power Consumption<br>(100M Full Operation)     | 3.4 watts / 11 BTU                                                                                                                                                                |
| <b>Switch Specifications</b>                   |                                                                                                                                                                                   |
| Switch Processing Scheme                       | Store-and-Forward                                                                                                                                                                 |
| Address Table                                  | 4K                                                                                                                                                                                |
| Flow Control                                   | Back pressure for half duplex<br>IEEE 802.3x pause frame for full duplex                                                                                                          |
| Switch Fabric                                  | 16Gbps                                                                                                                                                                            |
| Throughput (packet per second)                 | 11.9Mpps                                                                                                                                                                          |
| Jumbo Packet Size                              | 9K                                                                                                                                                                                |
| <b>Standards Conformance</b>                   |                                                                                                                                                                                   |
| 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)<br>IEEE 802.3az Energy Efficient Ethernet (EEE) |
| Regulatory Compliance                          | FCC Part 15 Class B, CE                                                                                                                                                           |
| <b>Standards Conformance</b>                   |                                                                                                                                                                                   |
| Temperature                                    | Operating: 0~50 degrees C<br>Storage: -10~70 degrees C                                                                                                                            |
| Humidity                                       | Operating :5~95%<br>Storage: 5~95% (non-condensing)                                                                                                                               |

## Ordering Information

|         |                                                                 |
|---------|-----------------------------------------------------------------|
| GSD-804 | 8-Port 10/100/1000BASE-T Gigabit Ethernet Switch (Plastic case) |
|---------|-----------------------------------------------------------------|

## Related Products

|         |                                                                 |
|---------|-----------------------------------------------------------------|
| GSD-503 | 5-Port 10/100/1000BASE-T Gigabit Ethernet Switch (Metal case)   |
| GSD-504 | 5-Port 10/100/1000BASE-T Gigabit Ethernet Switch (Plastic case) |
| GSD-803 | 8-Port 10/100/1000BASE-T Gigabit Ethernet Switch (Metal case)   |