

# Industrial 8-Port 10/100/1000T Wall-mounted Gigabit Ethernet Switch



## Easily-deployed and Expanded Network

Designed to be installed in a wall enclosure or simply mounted at any convenient location on a wall, PLANET WGS-803 is an innovative, wall-mounted industrial 8-port Gigabit Ethernet Switch. It comes in a compact but rugged IP30 metal housing. Featuring ultra networking speed and operating temperature ranging from -10 to 60 degrees C, the WGS-803 is an ideal solution to meeting the demand for the following network applications.

- Building / Home automation network
- Internet of things (IoT)
- IP surveillance and wireless

The WGS-803 is able to operate reliably, stably and quietly in any environment without affecting its performance, and provides a quick, safe and easy deployment of home automation network.

## Innovative Wall-mount Installation

The WGS-803 is specially designed to be installed in a narrow environment, such as wall enclosure or electric weak box. The compact, flat and wall-mounted design fits easily in any space-limited location. It adopts the user-friendly "Front Access" design, making the installing, cable wiring, LED monitoring and maintenance of the WGS-803 placed in an enclosure very convenient for technicians. The WGS-803 can be installed by fixed wall mounting, magnetic wall mounting or DIN rail, thereby making its usability more flexible.

## Physical Port

- 8-port 10/100/1000BASE-T Gigabit RJ45 copper

## Layer 2 Features

- High performance Store and Forward architecture; runt/CRC filtering eliminates erroneous packets to optimize the network bandwidth
- IEEE 802.3x flow control for full duplex operation and back pressure for half duplex operation
- 9K jumbo frame supported in 1000Mbps duplex mode
- Automatic address learning and address aging

## Industrial Case / Installation

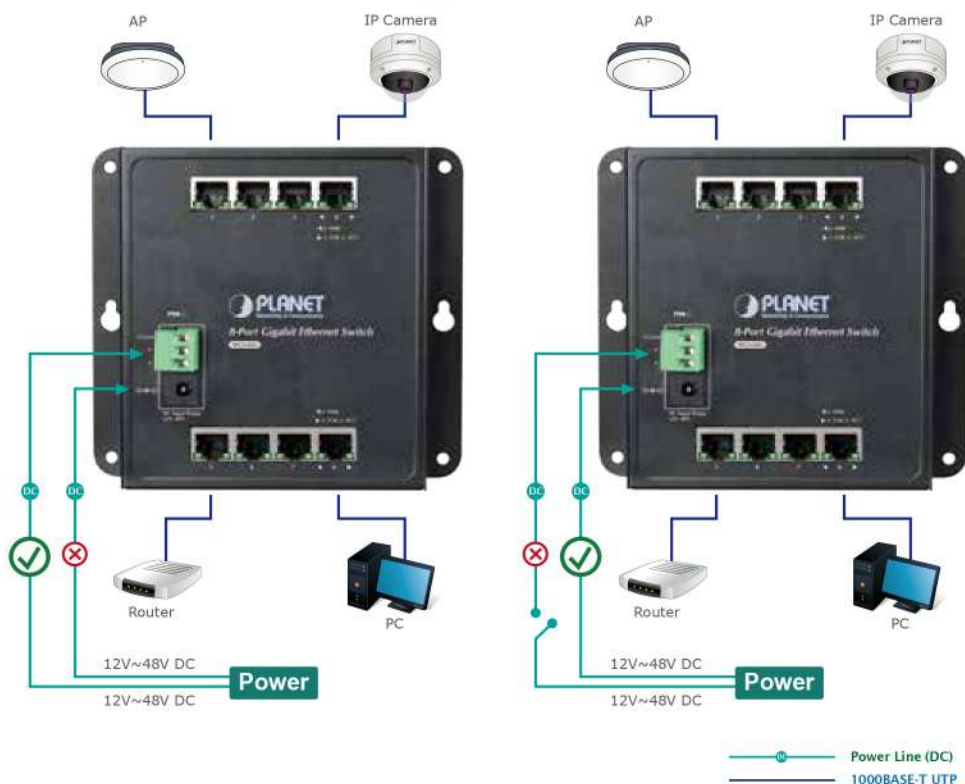
- Compact size, wall-mounted, magnetic wall mount and DIN-rail design
- IP30 metal chassis
- Supports -10 to 60 degrees C operating temperature
- Supports EFT 6000VDC protection for power line
- Supports ESD 6000VDC Ethernet protection
- 12V~48V DC input range for booting with polarity reverse protect function



#### *Dual Power Input for High Availability Network System*

The WGS-803 features a strong dual power input system (12V~48V DC) incorporated into customer's automation network to enhance system reliability and uptime. In the example below, when the 3-pin terminal block fails to work, the hardware failover function will be activated automatically to keep powering the WGS-803 via the DC plug power alternatively without any loss of operation.

### *Dual Power Input with Auto Failover*



### Robust Switch Performance

The WGS-803 is designed for a high-performance architecture. With the 8 10/100/1000Mbps Gigabit Ethernet ports providing non-blocking switch fabric and wire-speed throughput as high as 16Gbps, and the 8K MAC address table, the WGS-803 can perform wire-speed packets transfer without the risk of packet loss. The flow control function enables the WGS-803 to provide fast and reliable data transfer. The Gigabit port with 9K jumbo frame supported can handle extremely large amounts of data transmission in industrial topology that forward data to the central control room.

### Plug and Power Network Deployment

All of the RJ45 copper interfaces in the WGS-803 support 10/100/1000Mbps auto negotiation for optimal speed detection through RJ45 Category 6, 5 or 5e cables. The standard auto-MDI/MDI-X support can detect the type of connection to any Ethernet device without requiring special straight-through or crossover cables.

### Ready to Go with IoT Generation

Internet is very popular the world over as users surf online daily with their mobile devices, such as smart phones, tablets, or laptop computers. However, users expect more from the convenience of Internet, like how to use their mobile devices to control something via the Internet, thus making life more convenient. The WGS-803 is based on such concept to help users implement the Internet of things (IoT) on the SOHO/Home network. Home automation is no longer a dream as Gigabit network can easily cloud IoT equipment, making it a smart home.

## Applications

### Industrial Area Switch for Data Collection and Forwarding

The WGS-803 is equipped with 8 10/100/1000Mbps ports that offer auto MDI / MDIX feature, 16Gbps non-blocking switch fabric and the 8K MAC address table so that wire-speed packets can be transferred safely. The Gigabit ports supporting 9K jumbo packet can handle large amounts of data transmission in a secure topology linking to a backbone switch or high-power servers. The WGS-803 with the slim type IP30 metal case is ideal for most heavy industrial demanding environments.



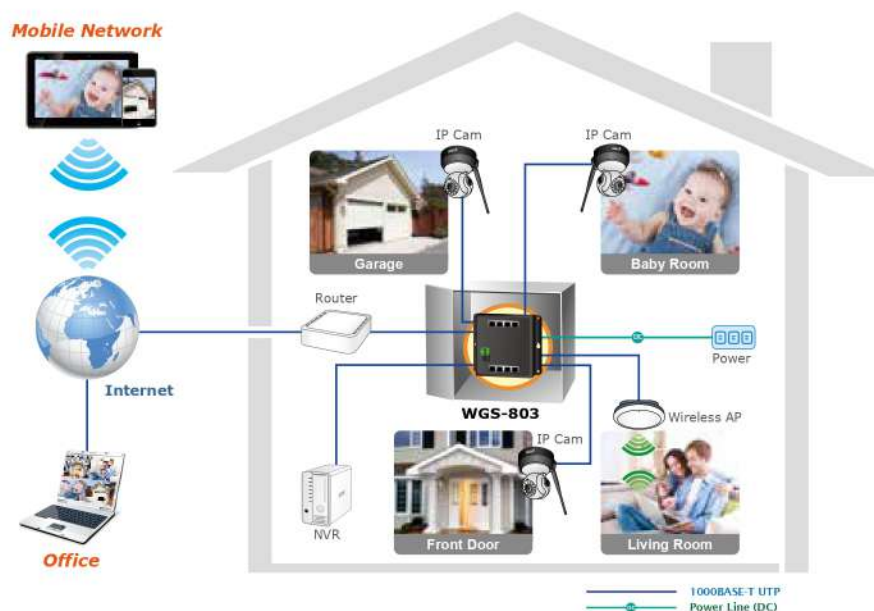
## Robotic Automation System

1000BASE-T UTP



### SOHO / Home-use Gigabit Ethernet Automation Network Deployment

With its expanded home-use feature, the WGS-803 Gigabit Ethernet Switch helps SOHO / home users to create an integrated network that is so easily utilized for transmission of data and video. The wireless AP and IP camera devices work perfectly with the WGS-803, which transmits data through the Ethernet cables, thus helping SOHO / home users to build a cost-effective and reliable Gigabit Ethernet networking environment easily.



## Specifications

Model	WGS-803
<b>Hardware Specifications</b>	
Network Connector	8-port RJ45 for 10/100/1000BASE-T
Switch Architecture	Store and forward
MAC Address Table	8K MAC address table with auto learning function
Data Buffer	1Mbit
Switch Fabric	16Gbps / non-blocking
Switch Throughput	11.9Mpps@64bytes
Jumbo Frame	9Kbytes
Flow Control	IEEE 802.3x pause frame for full duplex Back pressure for half duplex
LED Indicators	Power LED: Power (Green) 10/100/1000BASE-T Port • 1000 (Green) • LNK/ACT (Green)
Connector	• Removable 3-pin terminal block for power input – Pin 1/2 for DC Power – Pin 3 for earth ground • DC power jack with 2.0mm central pole
Power Requirements	12~48V DC, 0.5A (max.)
Power Consumption	6 watts / 20BTU
ESD Protection	6KV DC
EFT Protection	6KV DC
Enclosure	IP30 metal
Dimensions (W x D x H)	148 x 24.2 x 134 mm
Weight	498g
Installation	Wall mount, magnetic wall mount and DIN-rail kit

### Standard Conformance

Standard Compliance	IEEE 802.3 IEEE 802.3u IEEE 802.3ab IEEE 802.3x	Ethernet Fast Ethernet Gigabit Ethernet Flow Control
Regulation Compliance	FCC Part 15 Class A, CE	
Stability Testing	IEC 60068-2-32 (free fall) IEC 60068-2-27 (shock) IEC 60068-2-6 (vibration)	

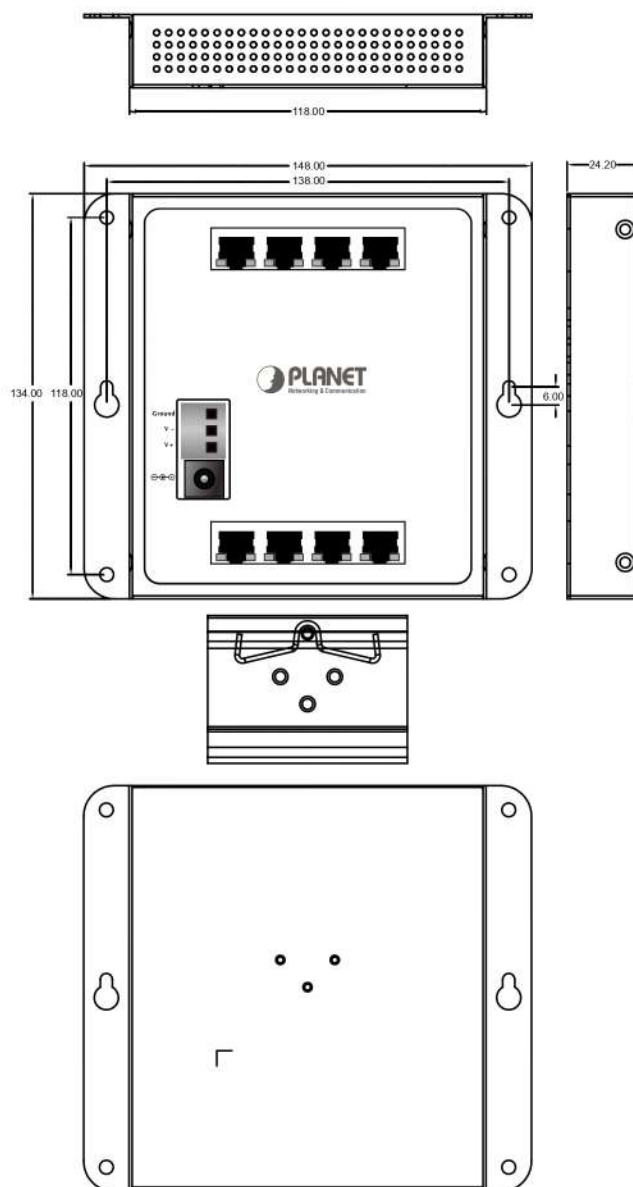
### Environment

Operating	<ul style="list-style-type: none"> <li>• Temperature: -10 ~ 60 degrees C</li> <li>• Relative Humidity: 5 ~ 95% (non-condensing)</li> </ul>
Storage	<ul style="list-style-type: none"> <li>• Temperature: -20 ~ 70 degrees C</li> <li>• Relative Humidity: 5 ~ 95% (non-condensing)</li> </ul>

### Accessories

Standard Accessories	<ul style="list-style-type: none"> <li>• User's manual x 1</li> <li>• Magnetic kit x 1</li> <li>• DIN-rail kit x 1</li> <li>• Wall-mounted kit x 1</li> <li>• Dust cap x 8</li> <li>• 3-pin terminal block connector x 1</li> </ul>
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## Drawing



Dimensions ( unit = mm )

## Ordering Information

WGS-803	8-Port 10/100/1000T Wall-mounted Gigabit Ethernet Switch
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## Accessories

PWR-40-24	40W 24V DC Single Output Industrial DIN-rail Power Supply (-20 ~ 70 degrees C)
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## Related Products

WGS-804HP	8-Port 10/100/1000T Wall-mounted Gigabit Ethernet Switch with 4-Port PoE+ (-10~60 degrees C)
HAC-1000	Z-Wave Home Automation Control Gateway
IAP-2000PE	Industrial 802.11n Wireless Access Point
WNAP-C3220	300Mbps 802.11n Wireless Ceiling Mount Range Extender
ICA-W7100	720p Wireless IR PT IP Camera

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**WGS-803**