

# 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-810 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 -20 to 60 degrees C, the WGS-810 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-810 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-810 is specially designed to be installed in a narrow environment, such as wall enclosure. 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-810 placed in an enclosure very convenient for technicians. The WGS-810 can be installed by fixed wall mounting, magnetic wall mounting or DIN-rail mounting, 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
- 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 and Installation

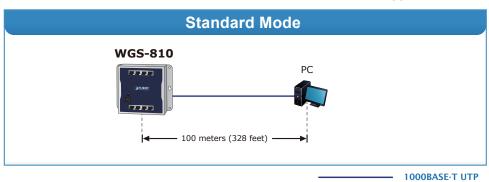
- Compact size; fixed wall mounting, magnetic wall mounting or DIN-rail mounting
- · IP30 metal chassis
- Supports -10 to 60 degrees C operating temperature
- Supports ESD 4KV ESD protection
- 12V DC input range



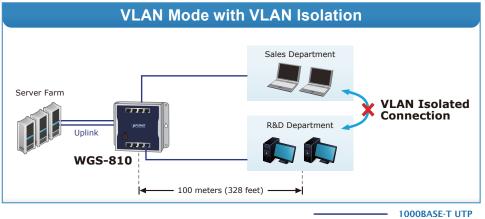


#### Standard, VLAN and Extend Operation Modes

The WGS-810 provides Standard, VLAN and Extend operation modes. The WGS-810 can operate as a normal gigabit switch in the standard operation mode.

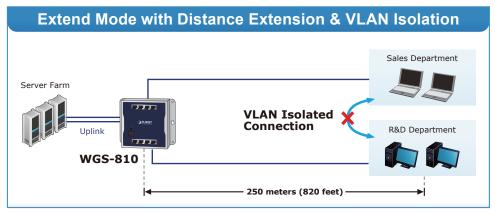


The **VLAN operation mode** features the port-based VLAN function that can help to prevent the multicast or broadcast storm from influencing each other. With two uplink ports with 1000Mbps transfer rate, it ensures high-speed data and video transmission, and reliable assurance for connection between server farm and end users.



In the **Extend operation mode**, the WGS-810 operate on a per-port basis at 10Mbps duplex operation but over a distance of up to 250 meters overcoming the 100m limit on Ethernet UTP cable. It also supports VLAN isolation to isolate ports so as to prevent broadcast storm and defend DHCP spoofing in the extend operation mode.





1000BASE-T UTP

#### Plug and Power Network Deployment

All of the RJ45 copper interfaces in the WGS-810 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-810 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.

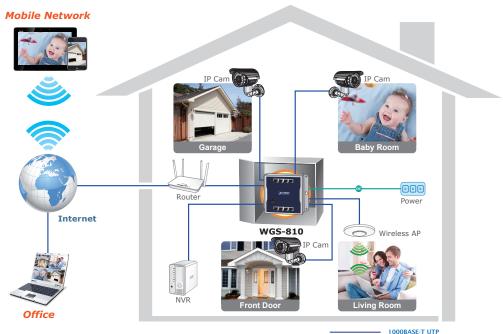
### **Applications**

#### Industrial Area Switch for Data Collection and Forwarding

The WGS-810 is equipped with 8 10/100/1000Mbps ports that offer auto MDI / MDIX feature, 16Gbps non-blocking switch fabric and the 4K 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-810 with the slim type IP30 metal case is ideal for most heavy industrial demanding environments.

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

With its expanded home-use feature, the WGS-810 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-810, 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-810
Hardware Specific	cations	
Network Connector		8-Port RJ45 for 10/100/1000BASE-T
Switch Architecture		Store and forward
MAC Address Table		4K MAC address table with auto learning function
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	•LNK/ACT (Green)
ESD Protection		4KV DC
DIP Switch		Selectable operation modes:
		■ Standard: Transmission distance of 100m
		■ VLAN: Port-based VLAN
		■ Extend: The transmission distance of 250m at speed of 10Mbps
Connector		DC power jack with 2.0mm central pole
Power Requirements		12V DC, 1A (max.)
Enclosure		IP30 metal
Dimensions (W x D x H)		148 x 25 x 134 mm
Weight		446 g
Installation		Fixed wall mounting, magnetic wall mounting or DIN-rail mounting
Standard Conform	mance	
Standard Compliance		IEEE 802.3 Ethernet
		IEEE 802.3u Fast Ethernet
		IEEE 802.3ab Gigabit Ethernet
		IEEE 802.3x Flow Control
		IEEE 802.3z Energy Efficient Ethernet
Regulatory 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		Temperature: -20 ~ 60 degrees C
		Relative Humidity: 5 ~ 95% (non-condensing)
Storage		Temperature: -20 ~ 70 degrees C
		Relative Humidity: 5 ~ 95% (non-condensing)

