Industrial 8-Port 10/100/1000T Wall-mounted Gigabit Ethernet Switch with 4-Port PoE+

Physical Port

- **8-Port 10/100/1000BASE-T** Gigabit RJ45 copper with 4-Port **IEEE 802.3at/af** PoE Injector function (Ports 1 to 4)

Power over Ethernet

- Complies with IEEE 802.3at Power over Ethernet Plus, end-span PSE
- Backward compatible with IEEE 802.3af Power over Ethernet
- Up to 4 ports of IEEE 802.3af/802.3at devices powered
- Supports PoE power up to 36 watts for each PoE port
- Auto detects powered device (PD)
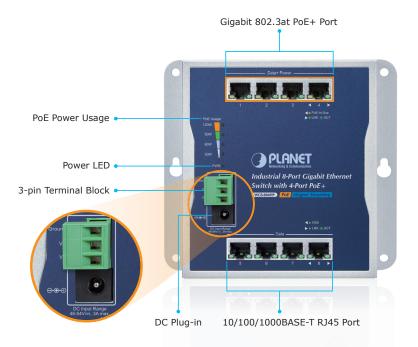- Circuit protection prevents power interference between ports

Switching

- Hardware-based 10/100Mbps, half/full duplex and 1000Mbps full duplex mode, flow control and auto-negotiation and auto MDI/MDI-X
- 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
- 8K MAC address table size
- 9K jumbo frame
- Automatic address learning and address aging
- Supports CSMA/CD protocol

Industrial Case and Installation

- Compact size, wall-mounted, magnetic wall mount and DIN-rail designs
- IP30 metal case
- Supports -40 to 75 degrees C operating temperature
- Supports EFT 6000VDC protection for power line
- Supports ESD 6000VDC Ethernet protection
- LED indicators for real-time PoE usage
- Redundant power design
  - 48V~54V DC wide power input
  - 3-pin terminal block or DC jack connector

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-804HP is an innovative, **wall-mounted industrial 8-port Gigabit Ethernet Switch with 4-port 802.3af/802.3at Power over Ethernet**. It comes in a compact but rugged IP30 metal housing. Featuring a total PoE budget of **120 watts**, ultra networking speed and operating temperature ranging from -**40 to 75 degrees C**, the WGS-804HP is an ideal solution to meeting the demand for sufficient PoE power for the following network applications.

- Building/Home automation network
- Internet of things (IoT)
- IP surveillance
- Wireless LAN

The WGS-804HP is able to operate reliably, stably and quietly in any environment without affecting its performance, and provides a quick, safe and easy deployment of PoE PDs with power feeding.

Gigabit 802.3at PoE+ Port

PoE Power Usage

Power LED

3-pin Terminal Block

DC Plug-in   10/100/1000BASE-T RJ45 Port

Innovative Wall-mount Installation

The WGS-804HP 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-804HP placed in an enclosure very convenient for technicians. The WGS-804HP can be installed by **fixed wall mounting**, **magnetic wall mounting** or **DIN rail**, thereby making its usability more flexible.

| Flat Design | DIN-rail Installation | Touch LCD | PoE Usage |

| 802.3bt PoE++ | Fiber Connection | Magnetic Installation | Front Access | Dual Power Input |

* The above pictures are for illustration only.

Centralized Power Distribution for Small Ethernet Networking

The WGS-804HP provides four PoE ports that combine up to **120 watts** of power output budget for catering to small-scale PoE network applications. Compliant with both IEEE 802.3at and IEEE 802.3af Power over Ethernet standards, each PoE port supplies up to 36 watts of power output and data transmission in Gigabit speed both delivered over one Cat.5e/6 Ethernet cable, powering remote PoE PD at distance up to 100 meters.

Intelligent LED Indicator for Real-time PoE Usage

To facilitate auto power management, the WGS-804HP implements **Power Budget Control** function that helps to prevent power budget overloading. Moreover, the WGS-804HP helps users to monitor the current status of PoE power usage easily and efficiently via its advanced LED indication. Called **"PoE Power Usage"**, the front panel of the WGS-804HP has four LEDs indicating **30W**, **60W**, **90W** and **120W** of power usage.

PoE Power Usage 120W

Ready to Power Up IoT

Internet is very popular the world over as users surf online daily with their mobile devices, such as smart phones and tablets, or laptop computers. However, users want more from the Internet, like how to use their mobile devices to control something via the Internet, thus making life more convenient. The WGS-804HP is based on such concept to help users implement the Internet of things (IoT) on the PoE network. Home automation is no longer a dream as Gigabit network performance plus power over Ethernet can easily drive IoT equipment, making it a smart home.
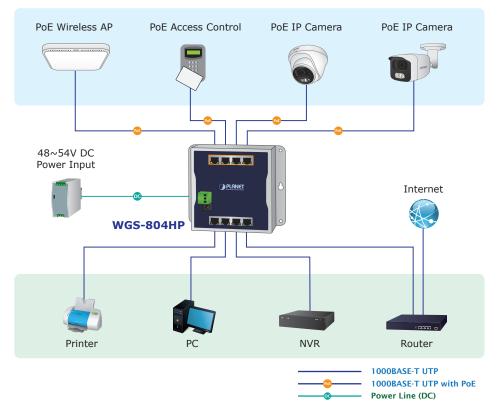
Quick, Safe and Easy PoE Network Deployment

Carrying both Ethernet data and power simultaneously, the WGS-804HP reduces cabling requirements and eliminates the need for dedicated electrical outlets on the wall, ceiling or any unreachable place. It helps users to utilize just one Ethernet cable to install and deploy IP camera, wireless AP or VoIP phone more efficiently and cost-effectively.

Applications

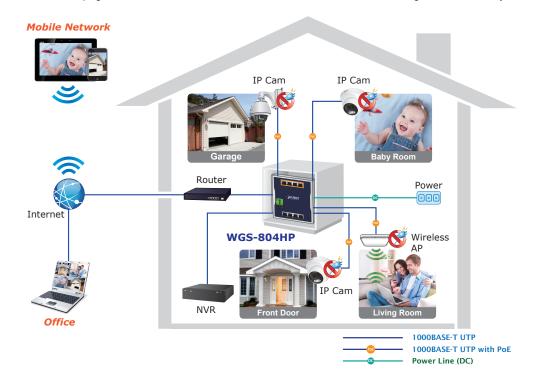### Industrial Area Department/Workgroup PoE Switch

The WGS-804HP provides 4 PoE, in-line power interfaces and can easily build a power centrally-controlled for an IP phone system, IP surveillance system, and wireless AP group in the harsh Industrial environment. For instance, 4 PoE IP cameras or PoE wireless APs can be easily installed for surveillance demands or building a wireless roaming environment in the industrial area. Without the power-socket limitation, the WGS-804HP series makes the installation of IP cameras or wireless APs easier and more efficient.

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SOHO/Home-Use Gigabit Ethernet PoE Network Deployment

With its expanded home-use feature, the WGS-804HP 802.3at PoE+ Switch helps SOHO/home users to create an integrated network where power is so easily utilized for transmission of data and video. The wireless AP and PoE IP camera devices work perfectly with the WGS-804HP, which injects power through the Ethernet cables, thus helping SOHO/home users to build a cost-effective and reliable PoE networking environment easily.
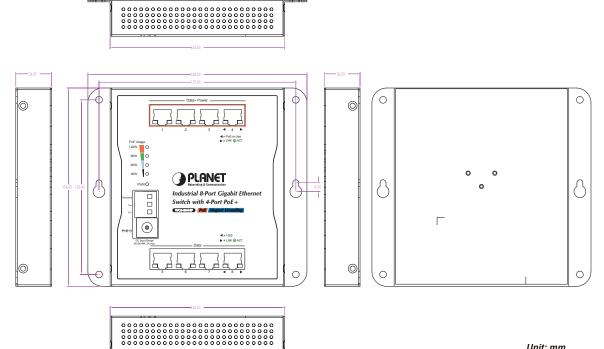

Specifications

Product	WGS-804HP
Hardware Specifications	
Copper Ports	8 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports
PoE Inject Port	4-Port with 802.3af/802.3at PoE injector function (Ports1 to 4)
Connector	■ Removable 3-pin terminal block for power input - Pin 1/2 for Power (Pin 1: V+ / Pin 2: V-) - Pin 3 for earth ground ■ DC power jack with 2.0mm central pole
Power Requirements	48V~54V DC, 3A (max.)
Power Consumption/ Dissipation	Max.130 watts/443 BTU
Dimensions (W x D x H)	148 x 25 x 134 mm
Weight	561g
ESD Protection	Contact Discharge 6KV DC Air Discharge 6KV DC
Enclosure	IP30 metal
Installation	Wall mount, magnetic wall mount and DIN-rail kit
LED	**Power LED:** Power (Green) **PoE Power Usage LED:** 30W, 60W, 90W, 120W (Amber) **PoE Ports (Ports 1 to 4):** PoE-in-Use (Amber) LNK/ACT (Green) **10/100/1000BASE-TX Ports (Ports 5 to 8):** 1000 (Green) LNK/ACT (Green)
Switch Specifications	
Switch Architecture	Store-and-Forward
Switch Fabric	16Gbps/non-blocking
Switch Throughput@64 bytes	11.9Mpps @64 bytes
MAC Address Table	8K entries

Shared Data Buffer	1Mbit
Flow Control	IEEE 802.3x pause frame for full duplex Back pressure for half duplex
Jumbo Frame	9KB
Power over Ethernet	
PoE Standard	IEEE 802.3af/802.3at Power over Ethernet PSE
PoE Power Supply Type	End-span
PoE Power Output	IEEE 802.3af Standard - Per port 48V~54V DC (depending on the power supply), max. 15.4 watts IEEE 802.3at Standard - Per port 50V~54V DC (depending on the power supply), max. 36 watts
Power Pin Assignment	1/2(+), 3/6(-)
PoE Power Budget	120 watts (depending on power input)
Max. Number of Class 2 PDs	4
Max. Number of Class 3 PDs	4
Max. Number of Class 4 PDs	4
Standards Conformance	
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)
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab Gigabit 1000BASE-T IEEE 802.3x Flow Control and Back Pressure
Environment	
Operating	Temperature: -40 ~ 75 degrees C Relative Humidity: 5 ~ 95% (non-condensing)
Storage	Temperature: -40 ~ 85 degrees C Relative Humidity: 5 ~ 95% (non-condensing)
Accessories	
Standard Accessories	■ QR Code Sheet x 1 ■ 3-pin Terminal Block Connector x 1 ■ Wall-mounted Kit x 1 ■ DIN-rail Kit x 1 ■ Magnet Kit x 1 ■ RJ45 Dust Cap x 8

Dimensions

Unit: mm

Ordering Information

WGS-804HP	8-Port 10/100/1000T Wall-mounted Gigabit Ethernet Switch with 4-Port PoE+ (-40~75 degrees C)

Accessories

PWR-120-48	120W 48V DC Single Output Industrial DIN-rail Power Supply (-20 ~ 70 degrees C)
PWR-240-48	240W 48V DC Single Output Industrial DIN-rail Power Supply (-20 ~ 70 degrees C)
PWR-480-48	480W 48V DC Single Output Industrial DIN-rail Power Supply (-20~ 70 degrees C)
PWR-980-48	960W 48V DC Single Output Industrial DIN-rail Power Supply (-30 ~ 70 degrees C)

Related PoE+ Indoor Wireless APs

WDAP-W1800AXU	Dual Band 802.11ax 1800Mbps In-wall Wireless Access Point w/802.3at PoE+ and Type C USB
WDAP-C3000AX	Dual Band 802.11ax 3000Mbps Ceiling-mount Wireless Access Point w/802.3at PoE+ and 2 10/100/1000T LAN Ports
WDAP-W1200E	Dual Band 802.11ac 1200Mbps Wave 2 In-wall Wireless Access Point (EU Type, 802.3at PoE, 3 x 10/100/1000T LAN Ports, 1 x RJ11 Port)
WDAP-C7210E	1200Mbps 802.11ac Wave 2 Dual Band Ceiling-mount Wireless Access Point w/802.3at PoE+ and 2 10/100/1000T LAN Ports

Related Outdoor Access Point/Bridge Products

WDAP-850AC	Dual Band 802.11ac 1200Mbps Wave 2 Outdoor Wireless AP
WDAP-3000AX	Dual Band 802.11ax 3000Mbps Outdoor Wireless AP (IP67, 802.3at PoE+, 4 x N-type connector)
WBS-900AC-KIT	5GHz 802.11ac 900Mbps TDMA Outdoor Long Range Wireless CPE Kit
WBS-512AC	5GHz 802.11ac 900Mbps Outdoor Wireless CPE

Related IP Surveillance PoE Products

ICA-3480	H.265 4MP Smart IR Bullet IP Camera
ICA-4480	H.265 4MP Smart IR Dome IP Camera
ICA-3480F	H.265+ 4MP Full Color Bullet IP Camera
ICA-4480F	H.265+ 4MP Full Color Dome IP Camera
ICA-M3580P	H.265 5 Mega-pixel Smart IR Bullet IP Camera with Remote Focus and Zoom
ICA-M4580P	H.265 5 Mega-pixel Smart IR Dome IP Camera with Remote Focus and Zoom
ICA-HM620	2 Mega-pixel PoE Plus Speed Dome Internet Camera
ICA-E6260	2 Mega-pixel PoE Plus Speed Dome IP Camera with Extended Support

Related PoE+ Indoor VoIP Products

ICF-1900	High Definition Touch Color Screen Smart Media Android SIP Conference Phone
VIP-1120PT	High Definition Color PoE IP Phone
VIP-1140PT	High Definition Color PoE IP Phone
VIP-1260PT	High Definition Color PoE Gigabit IP Phone

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