

# Industrial 8-port 10/100/1000T + 2-port 1G/2.5G SFP Wall-mount Managed Switch Series



## Wall-mount Managed Switch with Advanced L2+/L4 Switching and Security

Designed to be installed in a wall enclosure or simply mounted on a wall in any convenient location, PLANET WGS-5225-series, an innovative **Industrial 8-port 10/100/1000T + 2-port 1G/2.5G SFP Wall-mounted Managed Switch**, offers IPv6/IPv4 dual stack management, intelligent **Layer 2 and Layer 4** management functions, and **user-friendly interface**. The WGS-5225-series is able to operate reliably, stably and quietly in any environment without affecting its performance. Featuring ultra networking speed and operating in harsh environment with low and high temperature in a compact but rugged IP30 metal housing, the WGS-5225-series is an ideal solution to meeting the demand for the following network applications:

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

Model	WGS-5225-8P2S	WGS-5225-8P2SV	WGS-5225-8T2SV
Specifications			
10/100/1000T RJ45 Port	8	8	8
PoE+ Port/PoE Budget	8/240W	8/240W	-
SFP/mini-GBIC Slots	2, 1000/2500X	2, 1000/2500X	2, 1000/2500X
LCD Touch Screen	-	■	■
Power Requirements	48~56V DC	48~56V DC	12~48V DC
Operating Temperature	-40 to 75 degrees C	-20 to 70 degrees C	-20 to 70 degrees C

## Cybersecurity Network Solution to Minimize Security Risks

The cybersecurity feature included to protect the switch management in a mission-critical network virtually needs no effort and cost to install. Both SSHv2 and TLSv1.2 protocols are utilized to provide strong protection against advanced threats. The network administrator can now construct highly-secure corporate networks with considerably less time and effort than before.



## Physical Port

- 8 10/100/1000BASE-T Gigabit Ethernet RJ45 ports (**WGS-5225-8T2SV**)
- 8 10/100/1000BASE-T Gigabit RJ45 copper ports with IEEE 802.3at/af PoE Injector function (**WGS-5225-8P2S/ WGS-5225-8P2SV**)
- 2 1000/2500BASE-X SFP slots for SFP type auto detection

## Power over Ethernet (WGS-5225-8P2S/WGS-5225-8P2SV)

- Complies with IEEE 802.3at Power over Ethernet Plus, end-span PSE
- Backward compatible with IEEE 802.3af Power over Ethernet
- Up to 8 ports of IEEE 802.3af/802.3at devices powered
- Supports PoE power up to 36 watts for each PoE port
- 240-watt PoE budget
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100 meters in standard mode and 250m in extend mode
- PoE management
  - Total PoE power budget control
  - Per port PoE function enable/disable
  - PoE Port Power feeding priority
  - Per PoE port power limitation
  - PoE delay
  - PD classification detection
- Intelligent PoE features
- PD alive check
- PoE schedule
- PoE extension

## Industrial Case and Installation

- Compact size with fixed wall-mounted, magnetic wall-mounted or DIN-rail design
- IP30 metal case
- Supports -20 to 70 degrees C operating temperature (**WGS-5225-8T2SV/WGS-5225-8P2SV**)
- Supports -40 to 75 degrees C operating temperature (**WGS-5225-8P2S**)
- Supports ESD 6KV DC Ethernet protection
- Dual power input design
  - 12V~48V DC wide power input with reverse polarity protection (**WGS-5225-8T2SV**)
  - 48V~56V DC wide power input with reverse polarity

### Intuitive LCD Control

The WGS-5225-8T2SV and WGS-5225-8P2SV come with an intuitive touch panel on its front panel to facilitate the Ethernet management to greatly promote management efficiency in large-scale networks, such as enterprises, hotels, shopping malls, government buildings, and other public areas. It also features the following special management and status functions:

- IP address, VLAN and QoS configuration
- PoE management and status (WGS-5225-8P2SV only)
- Port management and status, and SFP information
- Troubleshooting: cable diagnostic and remote IP ping
- Maintenance: reboot, factory default and save configuration

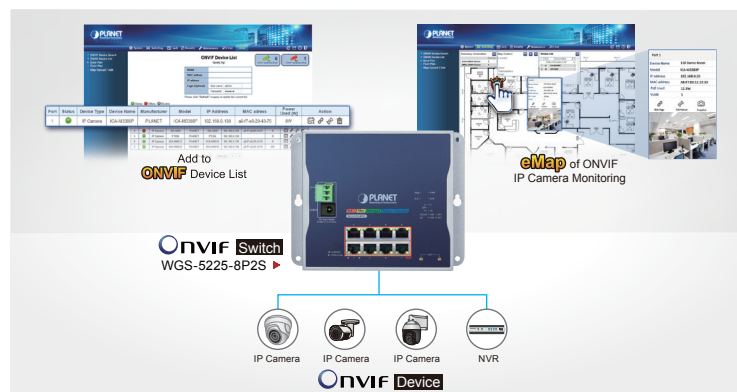


### Redundant Ring, Fast Recovery for Critical Network Applications

The WGS-5225-series supports redundant ring technology and features strong, rapid self-recovery capability to prevent interruptions and external intrusions. It incorporates advanced ITU-T G.8032 ERPS (Ethernet Ring Protection Switching) technology, Spanning Tree Protocol (802.1s MSTP) into customer's network to enhance system reliability and uptime in various environments. In a certain simple ring network, the recovery time of data link can be as fast as 10ms.

### Convenient and Smart ONVIF Devices with Detection Feature

PLANET has newly developed an awesome feature -- ONVIF Support -- which is specifically designed for co-operating with video IP surveillances. From the WGS-5225-8P2S and WGS-5225-8P2SV's GUI, you just need one click to search and show all of the ONVIF devices via network application. In addition, you can upload floor images to the switch and can remotely monitor or inspect an assembly line. Moreover, you can get real-time surveillance information and online/offline status; the PoE reboot can be controlled from the GUI.



protection (**WGS-5225-8P2S/WGS-5225-8P2SV**)

- 3-pin terminal block or DC jack connector

### Layer 2 Features

- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause frame flow control (full-duplex)
- High performance of Store-and-Forward architecture, and runt/CRC filtering eliminates erroneous packets to optimize the network bandwidth
- Storm Control support
  - Broadcast/Multicast/Unicast
- Supports VLAN
  - IEEE 802.1Q tagged VLAN
  - Up to 4K VLANs groups, out of 4094 VLAN IDs
  - Provider Bridging (VLAN Q-in-Q) support (IEEE 802.1ad)
  - Private VLAN Edge (PVE)
  - Protocol-based VLAN
  - MAC-based VLAN
  - Voice VLAN
- Supports **Spanning Tree Protocol**
  - IEEE 802.1D Spanning Tree Protocol (STP)
  - IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
  - IEEE 802.1s Multiple Spanning Tree Protocol (MSTP), spanning tree by VLAN
  - BPDU Guard
- Supports **Link Aggregation**
  - 802.3ad Link Aggregation Control Protocol (LACP)
  - Cisco ether-channel (static trunk)
- Provides port mirror (1-to-1)
- Port mirroring to monitor the incoming or outgoing traffic on a particular port
- Loop protection to avoid broadcast loops
- Supports ERPS (Ethernet Ring Protection Switching)

### Layer 3 IP Routing Features

- Supports maximum 32 static routes and route summarization

### Quality of Service

- Ingress Shaper and Egress Rate Limit per port bandwidth control
- 8 priority queues on all switch ports
- Traffic classification
  - IEEE 802.1p CoS
  - IP TOS/DSCP/IP precedence
  - IP TCP/UDP port number
  - Typical network application
- Strict priority and Weighted Round Robin (WRR) CoS policies
- Supports QoS and In/Out bandwidth control on each port
- Traffic-policing on the switch port
- DSCP remarking

### Built-in Unique PoE Functions for Powered Devices Management

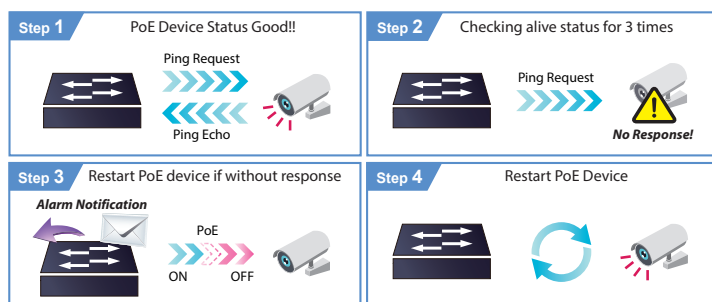
As it is ideal for surveillance, wireless and VoIP networks, the WGS-5225-8P2S and WGS-5225-8P2SV feature the following special PoE management functions:

- PD Alive Check
- Scheduled Power Recycling
- PoE Schedule
- PoE Usage Monitoring
- PoE Extension

### Intelligent Powered Device Alive Check

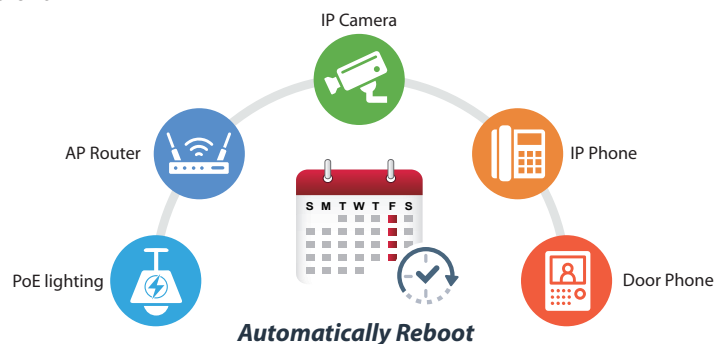
The WGS-5225-8P2S and WGS-5225-8P2SV can be configured to monitor connected PD (powered device) status in real time via ping action. Once the PD stops working and responding, the WGS-5225-8P2S and WGS-5225-8P2SV will resume the PoE port power and bring the PD back to work. It will greatly enhance the network reliability through the PoE port resetting the PD's power source, thus reducing the administrator's management burden.

### PD Alive Check



### Scheduled Power Recycling

The WGS-5225-8P2S and WGS-5225-8P2SV allow each of the connected PoE IP cameras or PoE wireless access points to reboot at a specified time each week. Therefore, it will reduce the chance of IP camera or AP crash resulting from buffer overflow.



### PoE Schedule for Energy Savings

Under the trend of energy savings worldwide and contributing to environmental protection, the WGS-5225-8P2S and WGS-5225-8P2SV can effectively control the power supply besides its capability of giving high watts power. The "PoE schedule" function helps you to enable or disable PoE power feeding for each PoE port during specified time intervals and it is a powerful function to help SMBs or enterprises save power and money. It also increases security by powering off PDs that should not be in use during non-business hours.

### Multicast

- Supports IPv4 IGMP snooping v1, v2 and v3
- Supports IPv6 MLD snooping v1 and v2
- Querier mode support
- IGMP snooping port filtering
- MLD snooping port filtering
- MVR (Multicast VLAN Registration)

### Security

- IEEE 802.1x Port-based/MAC-based network access authentication
- Built-in RADIUS client to cooperate with the RADIUS servers
- TACACS+ login users access authentication
- RADIUS/TACACS+ users access authentication
- IP-based Access Control List (ACL)
- MAC-based Access Control List
- Source MAC/IP address binding
- DHCP snooping to filter distrusted DHCP messages
- Dynamic ARP Inspection discards ARP packets with invalid MAC address to IP address binding
- IP Source Guard prevents IP spoofing attacks
- IP address access management to prevent unauthorized intruder

### Management

- Switch Management Interfaces
  - Telnet Command Line Interface
  - Web switch management
  - SNMP v1 and v2c switch management
  - SSHv2, TLSv1.2 and SNMP v3 secure access
  - 2.4-inch color LCD touch screen
- Four RMON groups (history, statistics, alarms, and events)
- IPv6 IP address/NTP/DNS management
- Built-in Trivial File Transfer Protocol (TFTP) client
- BOOTP and DHCP for IP address assignment
- Firmware upload/download via HTTP/TFTP
- DHCP Relay and DHCP Option 82
- User Privilege levels control
- Network Time Protocol (NTP)
- Link Layer Discovery Protocol (LLDP)
- SFP-DDM (Digital Diagnostic Monitor)
- Cable diagnostic technology provides the mechanism to detect and report potential cabling issues
- Reset button for system reboot or reset to factory default
- PLANET Smart Discovery Utility for deployment management
- PLANET NMS system and CloudViewer app for deployment management