

# Industrial L2+ 8-port 10/100/1000T 802.3at PoE + 2-port 1G/2.5G SFP Wall-mount Managed Switch



## Wall-mount PoE 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 PoE series, an innovative Industrial 8-port 10/100/1000T 802.3at PoE + 2-port 1G/2.5G SFP Wall-mounted Managed Switch with **LCD Touch Screen** (WGS-5225-8P2SV only), features PLANET intelligent PoE functions to improve the availability of industrial applications. It offers IPv6/IPv4 dual stack management, intelligent **Layer 2 and Layer 4** management functions, and user-friendly interface, with a total power budget of up to 240 watts for different kinds of PoE applications. Featuring ultra networking speed and operating temperature ranging from **-40 to 75 degrees C** for the WGS-5225-8P2S and from **-20 to 70 degrees C** for the WGS-5225-8P2SV in a compact but rugged IP30 metal housing, the WGS-5225 PoE series is an ideal solution to meet the demand for the following network applications:

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

## Cybersecurity Network Solution to Minimize Security Risks

The WGS-5225 PoE series supports SSHv2 and TLS protocols to provide strong protection against advanced threats. It includes a range of cybersecurity features such as **DHCP Snooping**, **IP Source Guard**, **dynamic ARP Inspection** Protection, **802.1x port-based** network access control, **RADIUS** and **TACACS+** user accounts management, **SNMPv3** authentication, and so on to complement it as an all-security solution.



## Physical Port

- **8 10/100/1000BASE-T** Gigabit RJ45 copper ports with IEEE 802.3at/af PoE Injector function
- **2 1000/2500BASE-X SFP** slots for SFP type auto detection

## 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 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 **-40 to 75 degrees C** operating temperature (WGS-5225-8P2S only)
- Supports **-20 to 70 degrees C** operating temperature (WGS-5225-8P2SV only)
- Supports ESD 6KV DC Ethernet protection

### Intuitive LCD Control (WGS-5225-8P2SV only)

The WGS-5225-8P2SV comes 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
- Port management and status, and SFP information
- Troubleshooting: cable diagnostic and remote IP ping
- Maintenance: reboot, factory default and save configuration

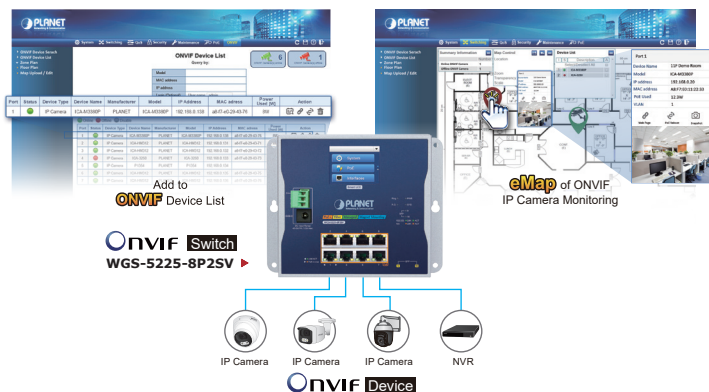


### Redundant Ring, Fast Recovery for Critical Network Applications

The WGS-5225 PoE 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 PoE series'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.



- **Dual** power input design
  - 48V~54V DC wide power input with reverse polarity protection
  - 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

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

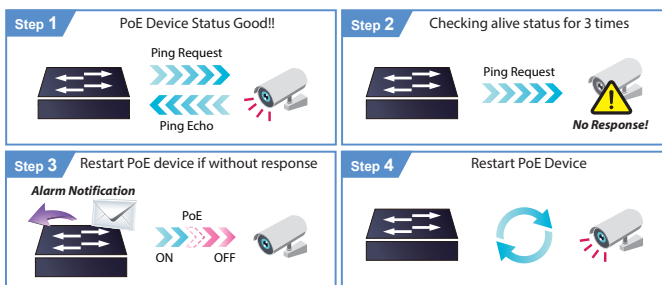
As it is the managed PoE switch for surveillance, wireless and VoIP networks, the WGS-5225 PoE series features the following special PoE management functions:

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

### Intelligent Powered Device Alive Check

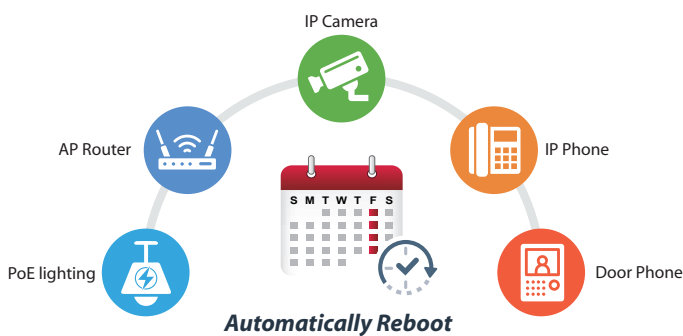
The WGS-5225 PoE series can be configured to monitor connected PD (powered device) status in real time via ping action. Once the PD stops working and responding, the WGS-5225 PoE series will resume the PoE port power and bring the PD back to work. It will greatly enhance the network reliability through 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 PoE series allows 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 PoE series 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.

### Quality of Service

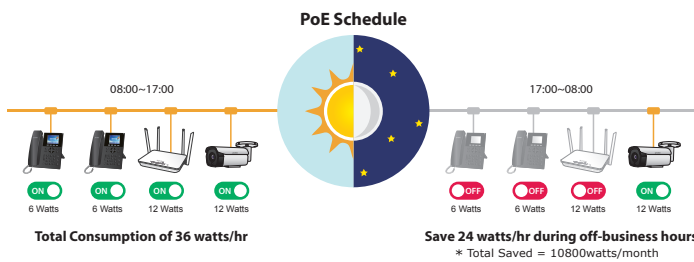
- Ingress Shaper and Egress Rate Limit per port bandwidth control
- 8 priority queues on all switch ports
- Traffic classification
  - IEEE 802.1p CoS
  - IP TOS/DSCP/IP precedence
  - IP TCP/UDP port number
  - Typical network application
- Strict priority and Weighted Round Robin (WRR) CoS policies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

### 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

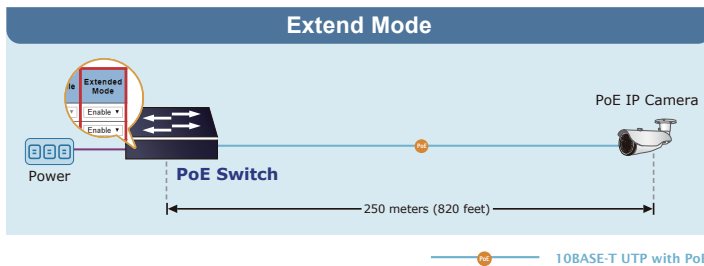


### PoE Usage Monitoring

Via the power usage chart in the web management interface, the WGS-5225 PoE series enables the administrator to monitor the status of the power usage of the connected PDs in real time. Thus, it greatly enhances the management efficiency of the facilities.

### 802.3at PoE+ Power and Ethernet Data Transmission Distance Extension

In the “Extend” operation mode, the WGS-5225 PoE series operates on a per-port basis at 10Mbps duplex operation but can support 36-watt PoE power output over a distance of up to **250 meters** overcoming the 100m limit on Ethernet UTP cable. With this brand-new feature, the WGS-5225 PoE series provides an additional solution for 802.3at/af PoE distance extension, thus saving the cost of Ethernet cable installation.



### Innovative Wall-mount Installation

The WGS-5225 PoE series 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-5225 PoE series placed in an enclosure very convenient for technicians. The WGS-5225 PoE series can be installed by **fixed wall mounting, magnetic wall mounting or DIN rail**, thereby making its usability more flexible.



\* The above pictures are for illustration only.

### 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 (WGS-5225-8P2SV only)
- 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/CloudViewerPro for deployment management

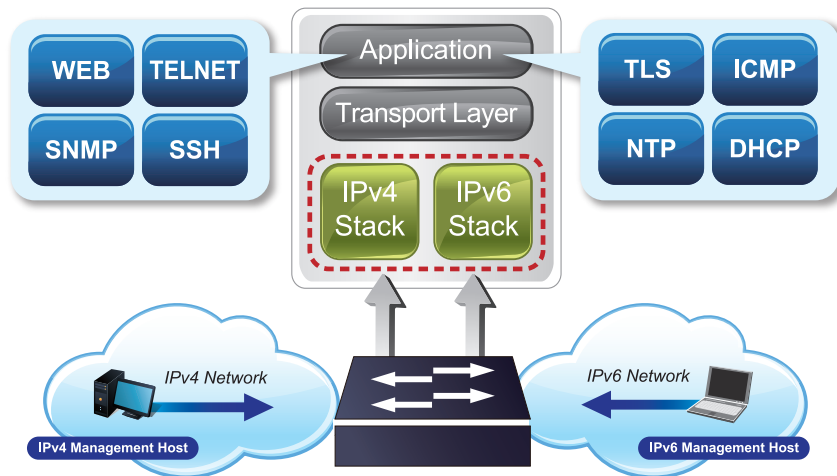
### Environmentally Hardened Design

With IP30, flat but rugged metal housing protection, the WGS-5225 PoE series provides a high level of immunity against electromagnetic interference and heavy electrical surges which are usually found on plant floors or in curb-side traffic control cabinets without air conditioner. Being able to operate under the temperature range from **-40 to 75 degrees C** for the WGS-5225-8P2S and from **-20 to 70 degrees C** for the WGS-5225-8P2SV, the WGS-5225 PoE series can be placed in almost any difficult environment.



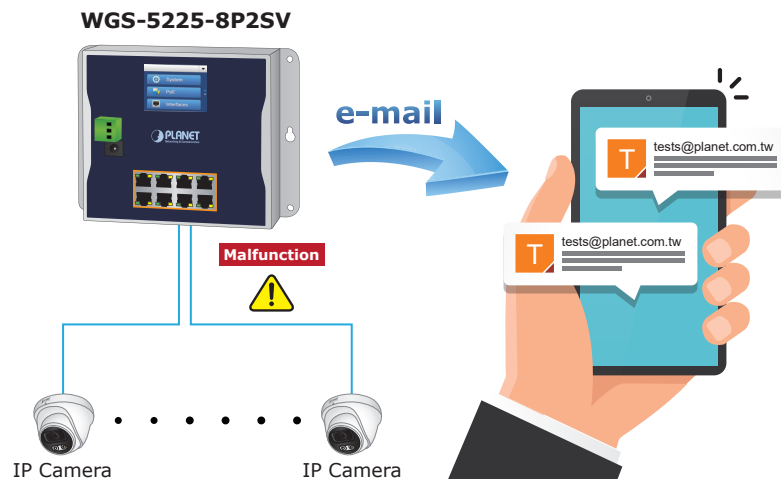
### IPv6/IPv4 Dual Stack Management

Supporting both IPv6 and IPv4 protocols, the WGS-5225 PoE series helps the SMBs to step in the IPv6 era with the lowest investment as its network facilities need not be replaced or overhauled if the IPv6 FTTx edge network is set up.



### SMTP/SNMP Trap Event Alert

The WGS-5225 PoE series provides event alert function to help to diagnose the abnormal device owing to whether or not there is a break of the network connection, or the rebooting response.

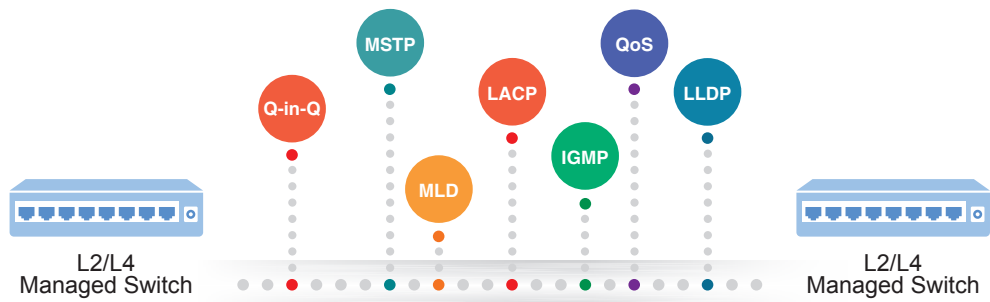


### Layer 3 IPv4 and IPv6 Software VLAN Routing for Secure and Flexible Management

To help customers stay on top of their businesses, the WGS-5225 PoE series not only provides ultra high transmission performance and excellent Layer 2 technologies, but also IPv4/IPv6 software VLAN routing feature which allows to cross over different VLANs and different IP addresses for the purpose of having a highly-secure, flexible management and simpler networking application.

### Robust Layer 2 Features

The WGS-5225 PoE series can be programmed for advanced switch management functions such as dynamic port link aggregation, 802.1Q VLAN, **Q-in-Q VLAN**, **Multiple Spanning Tree Protocol (MSTP)**, Loop and **BPDU Guard**, **IGMP Snooping**, and **MLD Snooping**. Via the link aggregation, the WGS-5225 PoE series allows the operation of a high-speed trunk to combine with multiple ports such as a 20Gbps fat pipe, and supports fail-over as well. Also, the **Link Layer Discovery Protocol (LLDP)** is the Layer 2 protocol included to help discover basic information about neighboring devices on the local broadcast domain.



### Efficient Traffic Control

The WGS-5225 PoE series is loaded with robust QoS features and powerful traffic management to enhance services to business-class data, voice, and video solutions. The functionality includes broadcast/multicast/unicast **storm control**, per port bandwidth control, 802.1p/CoS/IP DSCP QoS priority and remarking. It guarantees the best performance in VoIP and video stream transmission, and empowers the enterprises to take full advantage of the limited network resources.

### Powerful Security

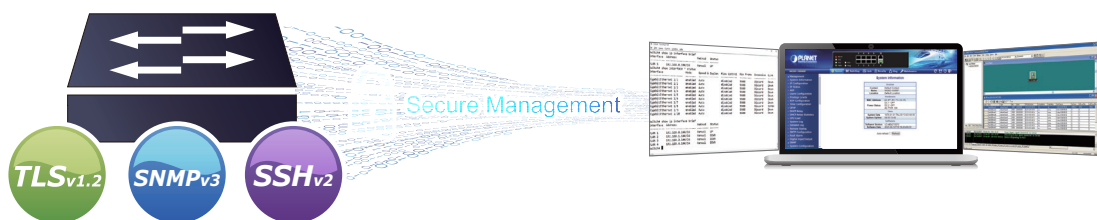
PLANET WGS-5225 PoE series offers comprehensive **IPv4/IPv6** Layer 2 to Layer 4 **Access Control List (ACL)** for enforcing security to the edge. It can be used to restrict network access by denying packets based on source and destination IP address, TCP/UDP ports or defined typical network applications. Its protection mechanism also comprises **802.1X port-based** user and device authentication, which can be deployed with RADIUS to ensure the port level security and block illegal users. With the **protected port** function, communication between edge ports can be prevented to guarantee user privacy. Furthermore, **Port security** function allows to limit the number of network devices on a given port. The network administrators can now construct highly-secure corporate networks with considerably less time and effort than before.

### User-friendly and Secure Management

For efficient management, the WGS-5225 PoE series is equipped with Command line, Web and SNMP management interfaces.

- With the built-in **Web-based** management interface, the WGS-5225-8P2SV offers an easy-to-use, platform-independent management and configuration facility.
- For **text-based** management, it can be accessed via Telnet.
- By supporting the standard SNMP protocol, the switch can be managed via any SNMP-based management software.

Moreover, the WGS-5225-8P2SV offers secure remote management by supporting **SSHv2**, **TLSv1.2** and **SNMP v3** connections which encrypt the packet content at each session.



### Modbus TCP Provides Flexible Network Connectivity for Factory Automation

With the supported Modbus TCP/IP protocol, the WGS-5225 PoE series can easily integrate with SCADA systems, HMI systems and other data acquisition systems in factory floors. It enables administrators to remotely monitor the industrial Ethernet switch's operating information, port information and communication status, thus easily achieving enhanced monitoring and maintenance of the entire factory.

### Remote Management Solution

PLANET's **Universal Network Management System (UNI-NMS)** and CloudViewer/CloudViewerPro app support IT staff by remotely managing all network devices and monitoring PDs' operational statuses. Thus, they're designed for both the enterprises and industries where deployments of PDs can be as remote as possible, without having to go to the actual location once a bug or faulty condition is found. With the UNI-NMS or CloudViewer/CloudViewerPro app, all kinds of businesses can now be speedily and efficiently managed from one platform.

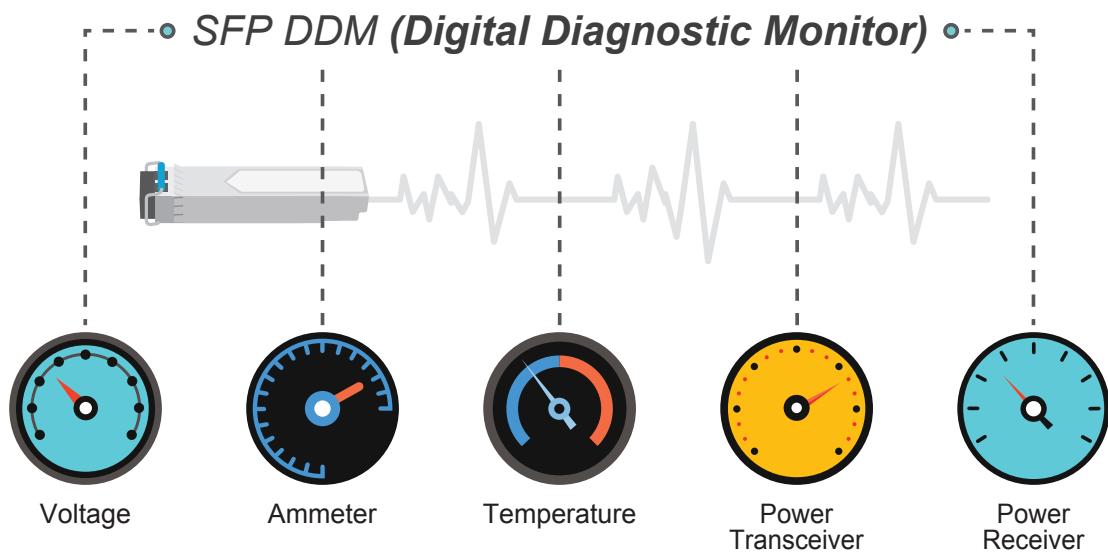


### Flexibility and Long-distance Extension Solution

The two SFP slots built in the WGS-5225 PoE series support SFP auto-detection and triple speed as it features **100BASE-FX**, **1000BASE-SX/LX** and **2500BASE SFP** (Small Form-factor Pluggable) fiber transceivers to uplink to backbone switch and monitoring center in long distance. The distance can be extended from 300 meters to 2 kilometers (multi-mode fiber) and to 10/20/40/60/80/120 kilometers (single-mode fiber or WDM fiber). They are well suited for applications within the enterprise data centers and distributions.

### Intelligent SFP Diagnosis Mechanism

The WGS-5225 PoE series supports **SFP-DDM (Digital Diagnostic Monitor)** function that can easily monitor real-time parameters of the SFP for the network administrator, such as optical output power, optical input power, temperature, laser bias current, and transceiver supply voltage.



### 1588 Time Protocol for Industrial Computing Networks

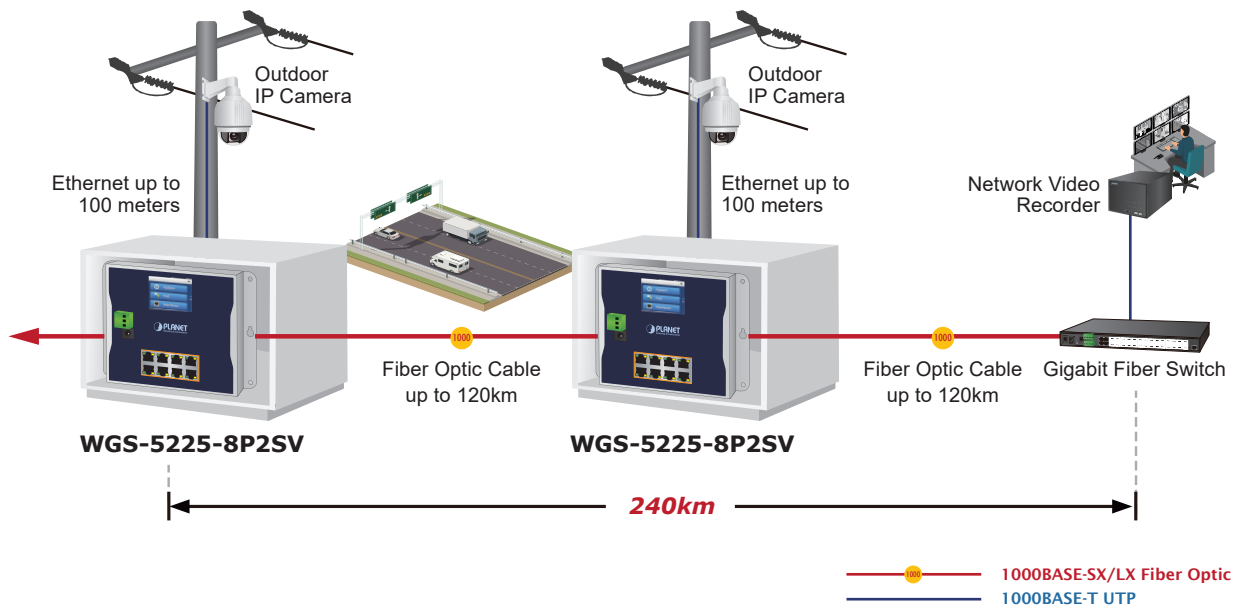
The WGS-5225 PoE series is ideal for telecom and Carrier Ethernet applications, supporting MEF service delivery and timing over packet solutions for IEEE 1588 and synchronous Ethernet.

## Applications

### Model that Withstands Harsh Operation and Extends Distance

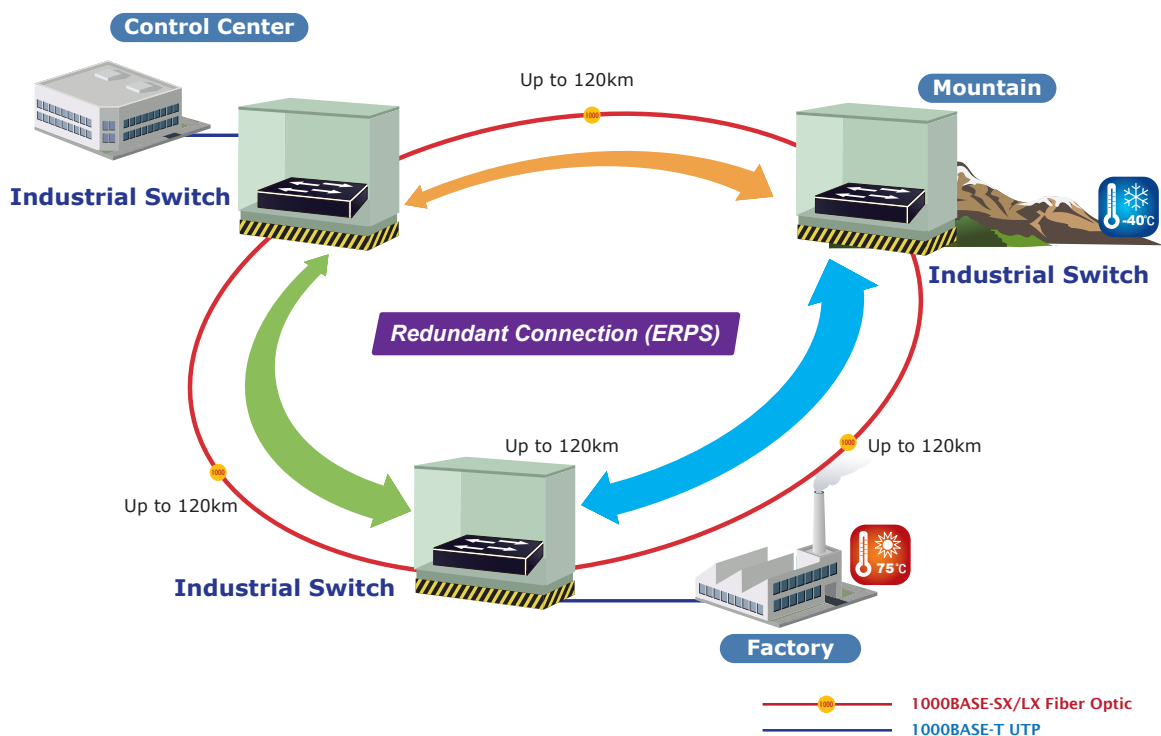
The WGS-5225 PoE series is made to withstand any harsh operation in such environments as traffic control cabinets, factory floors, and indoor and outdoor locations where temperatures are extremely high or low. With a non-blocking design and compact size, the installation of the WGS-5225 PoE series is easy and helpful to build a Gigabit high-bandwidth switched network quickly.

## Extending Ethernet Distance



### ITU-T G.8032 ERPS Makes Data Transmission Uninterrupted

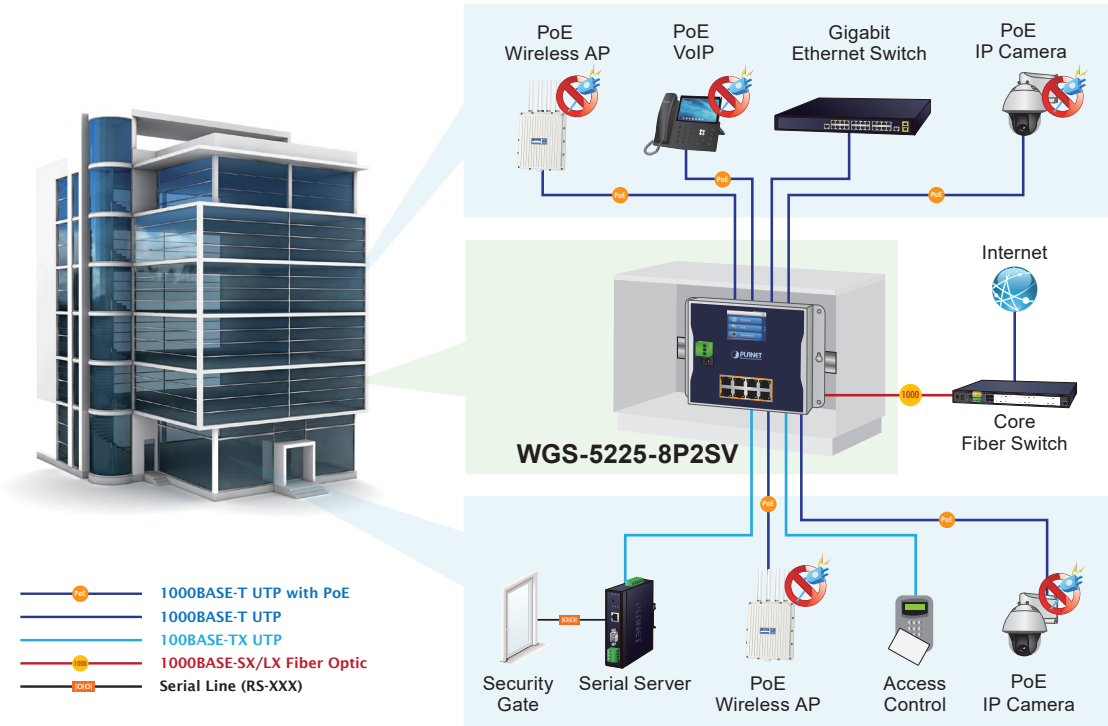
The WGS-5225 PoE series features strong rapid self-recovery capability to prevent interruptions and external intrusions. It incorporates **ITU-T G.8032 ERPS (Ethernet Ring Protection Switching)** technology into customer's automation network to enhance system reliability and uptime. Applying the IEEE 802.3at Power over Ethernet standard, the WGS-5225 PoE series can directly connect with any IEEE 802.3at end-nodes like PTZ (Pan, Tilt & Zoom) network cameras and speed dome cameras. The WGS-5225 PoE series can easily help system integrators with the available network infrastructure to build wireless AP, IP camera and VoIP systems where power can be centrally-controlled.





### Security Building Automation Switch

Suitable for buildings where security is strictly to be enforced, the WGS-5225 PoE series Industrial Wall-mount Managed Switch offers a comprehensive Layer 2 to Layer 4 Access Control List (ACL). The switch can restrict network access by denying packets based on source and destination IP address, TCP/UDP ports or defined typical network applications. With the WGS-5225 PoE series, a tightly-controlled network can be easily had in no time.



## Specifications

Product		WGS-5225-8P2S	WGS-5225-8P2SV
<b>Hardware Specifications</b>			
Copper Ports		8 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports	
PoE Injector Port		8 ports with 802.3at/af PoE injector function (Ports 1 to 8)	
SFP Slots		2 1000/2500BASE-SX/LX/BX SFP interfaces (Ports 9 to 10) Compatible with 100BASE-FX SFP	
Display		-	2.4-inch Color Touch LCD
SDRAM		128Mbytes	
Flash Memory		64Mbytes	
Reset Button		< 5 sec: System reboot > 5 sec: Factory default	
ESD Protection		6KV DC	
Enclosure		IP30 metal case	
Installation		DIN-rail kit, wall-mount and magnetic-mount	
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	
Dimensions (W x D x H)		180 x 24.4 x 140 mm	
Weight		657g	671g
Power Requirements		Dual 48~54V DC (>51V DC for PoE+ output recommended)	
Power Consumption	Power on without any connection	Max. 6.72 watts/22.93BTU	Max. 6.83 watts/23.3BTU
	Full loading with PoE function	Max. 254.8 watts/869.41BTU	Max. 255.4 watts/871.46BTU

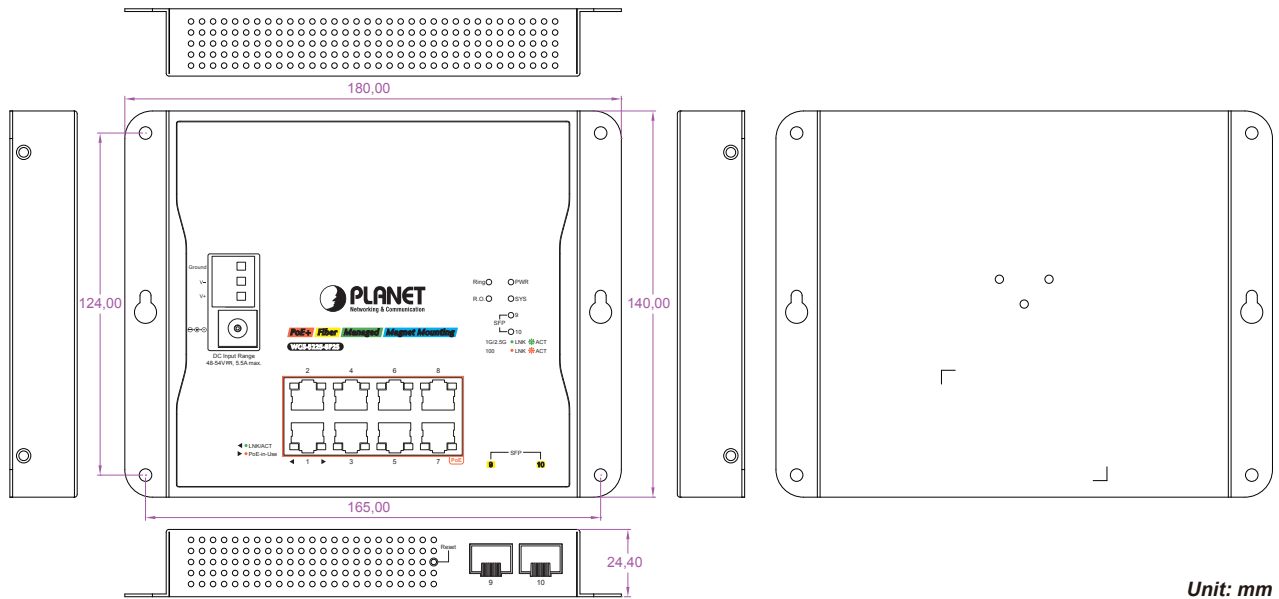
LED Indicator	<p>System:  PWR(<b>Green</b>)  SYS (<b>Green</b>)  Ring (<b>Green</b>)  Ring Owner (<b>Green</b>)</p> <p>Per 10/100/1000T RJ45 PoE+ Ports:  PoE-in-Use (<b>Amber</b>)  LNK/ACT (<b>Green</b>)</p> <p>Per SFP Interface:  100 LNK/ACT (<b>Amber</b>)  1G/2.5G LNK/ACT (<b>Green</b>)</p>
<b>Switching Specifications</b>	
Switch Architecture	Store-and-Forward
Switch Fabric	26Gbps/non-blocking
Throughput	19.34Mpps@ 64 bytes packet
Address Table	8K entries, automatic source address learning and aging
Shared Data Buffer	4M bits
Flow Control	IEEE 802.3x pause frame for full duplex Back pressure for half duplex
Jumbo Frame	9K bytes
<b>Power Over Ethernet</b>	
PoE Standard	IEEE 802.3at Power over Ethernet Plus/PSE
PoE Power Supply Type	End-span
PoE Power Output	IEEE 802.3af Standard - Per port 48V~51V DC (depending on the power supply), max. 15.4 watts IEEE 802.3at Standard - Per port 51V~54V DC (depending on the power supply), max. 36 watts
Power Pin Assignment	1/2(+), 3/6(-)
PoE Power Budget	240W maximum (depending on power input)
Max. Number of Class 2 PDs	8
Max. Number of Class 3 PDs	8
Max. Number of Class 4 PDs	8
<b>PoE Management Functions</b>	
Enhanced PoE Mode	Yes
Active PoE Device Live Detection	Yes
PoE Power Recycling	Yes, daily or predefined schedule
PoE Schedule	4 schedule profiles
PoE Extend Mode	Yes, max. 250 meters
PoE System Management	System PoE Admin. control Total PoE power budget control Auto power input and PoE budget control Over-temperature threshold alarm PoE usage threshold alarm
PoE Port Management	Port enable/disable/schedule PoE mode control - Standard mode - Legacy - Force mode Port Priority
<b>Layer 2 Management Functions</b>	
Port Configuration	Port disable/enable Auto-negotiation 10/100/1000Mbps full and half duplex mode selection Flow control disable/enable Power saving mode control
Port Status	Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status
Port Mirroring	TX/RX/both Many-to-1 monitor RMirror – Remote Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions

VLAN	<p>802.1Q tag-based VLAN</p> <p>Q-in-Q tunneling</p> <p>Private VLAN Edge</p> <p>MAC-based VLAN</p> <p>Protocol-based VLAN</p> <p>Voice VLAN</p> <p>MVR (Multicast VLAN Registration)</p> <p>GVRP (GARP VLAN Registration Protocol)</p> <p>Up to 4K VLAN groups, out of 4094 VLAN IDs</p>
Link Aggregation	<p>IEEE 802.3ad LACP/static trunk</p> <p>Supports 5 trunk groups with 10 ports per trunk group</p>
Spanning Tree Protocol	<p>IEEE 802.1D Spanning Tree Protocol (STP)</p> <p>IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)</p> <p>IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)</p> <p>BPDU Guard</p>
IGMP Snooping	<p>IGMP (v1/v2/v3) snooping</p> <p>IGMP querier mode support</p> <p>Up to 255 multicast groups</p>
MLD Snooping	<p>MLD (v1/v2) snooping</p> <p>MLD querier mode support</p> <p>Up to 255 multicast groups</p>
Bandwidth Control	<p>Per port bandwidth control</p> <p>Ingress: 500Kb~1000Mbps</p> <p>Egress: 500Kb~1000Mbps</p>
Ring	<p>Supports ERPS, and complies with ITU-T G.8032</p> <p>Supports major ring and sub-ring</p> <p>Recovery time &lt; 10ms @ 3 units</p> <p>Recovery time &lt; 50ms @ 16 units</p>
Synchronization	<p>IEEE 1588v2 PTP (Precision Time Protocol)</p> <ul style="list-style-type: none"> <li>- Peer-to-peer transparent clock</li> <li>- End-to-end transparent clock</li> </ul>
QoS	<p>Traffic classification based, strict priority and WRR</p> <p>8-level priority for switching</p> <ul style="list-style-type: none"> <li>- Port number</li> <li>- 802.1p priority</li> <li>- 802.1Q VLAN tag</li> <li>- DSCP/TOS field in IP packet</li> </ul>
<b>Security Functions</b>	
Access Control List	<p>IPv4/IPv6 IP-based ACL/MAC-based ACL</p> <p>ACL based on:</p> <ul style="list-style-type: none"> <li>- MAC Address</li> <li>- IP Address</li> <li>- Ethertype</li> <li>- Protocol Type</li> <li>- VLAN ID</li> <li>- DSCP</li> <li>- 802.1p Priority</li> </ul> <p>Up to 256 entries</p>
Security	<p>Port security</p> <p>IP source guard, up to 256 entries</p> <p>Dynamic ARP inspection, up to 1K entries</p> <p>Command line authority control based on user level</p>
MAC Security	<p>IP-MAC port binding</p> <p>MAC filter</p> <p>Static MAC address, up to 64 entries</p>
AAA	<p>Built-in RADIUS client to co-operate with RADIUS server</p> <p>RADIUS/TACACS+ user access authentication</p>

Network Access Control	IEEE 802.1x port-based network access control MAC-based authentication Local/RADIUS authentication	
<b>Layer 3 Functions</b>		
IP Interfaces	Max. 8 VLAN interfaces	
Routing Table	Max. 32 routing entries	
Routing Protocols	IPv4 software static routing IPv6 software static routing	
<b>Management</b>		
Basic Management Interfaces	Telnet/Web browser/SNMP v1, v2c	
Secure Management Interfaces	SSHv2, TLS v1.2, SNMP v3	
System Management	Firmware upgrade by HTTP/TFTP protocol through Ethernet network LLDP protocol SNTP PLANET Smart Discovery Utility PLANET NMS System and CloudViewer/CloudViewerPro	
Event Management	Remote Syslog Local System log SMTP	
SNMP MIBs	RFC 1213 MIB-II IF-MIB RFC 1493 Bridge MIB RFC 1643 Ethernet MIB RFC 2863 Interface MIB RFC 2665 Ether-Like MIB RFC 2819 RMON MIB (Groups 1, 2, 3 and 9) RFC 2737 Entity MIB RFC 2618 RADIUS Client MIB RFC 2933 IGMP-STD-MIB RFC 3411 SNMP-Frameworks-MIB IEEE 802.1X PAE LLDP MAU-MIB	
<b>Standards Conformance</b>		
Regulatory Compliance	FCC Part 15 Class A, CE	
Stability Testing	IEC60068-2-32 (free fall) IEC60068-2-27 (shock) IEC60068-2-6 (vibration)	
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX/100BASE-FX IEEE 802.3z Gigabit SX/LX IEEE 802.3ab Gigabit 1000T IEEE 802.3x flow control and back pressure IEEE 802.3ad port trunk with LACP IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.1s Multiple Spanning Tree Protocol IEEE 802.1p Class of Service IEEE 802.1Q VLAN tagging IEEE 802.1X Port Authentication Network Control	IEEE 802.1ab LLDP ITU-T G.8032 Ethernet Ring Protection Switching RFC 768 UDP RFC 768 UDP RFC 783 TFTP RFC 793 TCP RFC 791 IP RFC 792 ICMP RFC 2068 HTTP RFC 1112 IGMP v1 RFC 2236 IGMP v2
<b>Environment</b>		
Operating Temperature	-40 ~ 75 degrees C	-20 ~ 70 degrees C
Storage Temperature	-40 ~ 75 degrees C	-20 ~ 70 degrees C
Humidity	5 ~ 95% (non-condensing)	

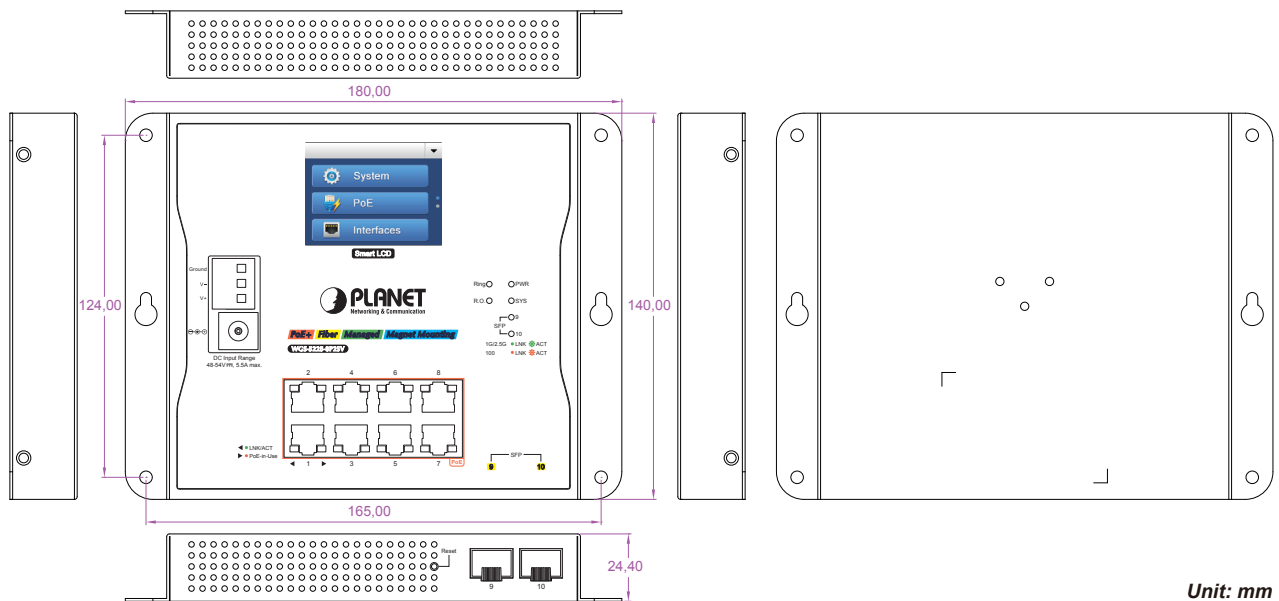
## Dimensions

### ■ WGS-5225-8P2S



Unit: mm

### ■ WGS-5225-8P2SV



Unit: mm

## Ordering Information

WGS-5225-8P2S	Industrial L2+ 8-Port 10/100/1000T 802.3at PoE + 2-Port 1G/2.5G SFP Wall-mount Managed Switch
WGS-5225-8P2SV	Industrial L2+ 8-Port 10/100/1000T 802.3at PoE + 2-port 1G/2.5G SFP Wall-mount Managed Switch with LCD Touch Screen

## Related Product

WGS-5225-8T2SV	Industrial L2+ 8-port 10/100/1000T + 2-port 1G/2.5G SFP Wall-mount Managed Switch with LCD Touch Screen
WGS-5225-8MT	Industrial L2+ 8-Port 10/100/1000T M12 Wall-mount Managed Switch
WGS-5225-8UP2SV	Industrial L2+ 8-Port 10/100/1000T 802.3bt PoE + 2-Port 1G/2.5G SFP Wall-mount Managed Switch with LCD Touch Screen
WGS-6325-8UP2X	Industrial L3 4-Port 2.5G 802.3bt PoE + 4-Port 10/100/1000T 802.3bt PoE + 2-Port 10G SFP+ Wall-mount Managed Switch

## Available Modules for WGS-5225 series

MGB-2G-Series Transceiver	2500BASE-SX/LX Transceiver
MGB-Series Transceiver	1000BASE-SX/LX SFP Transceiver
MFB-Series Transceiver	100BASE-FX SFP Transceiver

## Accessories

PWR-120-48	120W 48V DC Single Output Industrial DIN-rail Power Supply (-10 ~ 60 degrees C)
PWR-240-48	240W 48V DC Single Output Industrial DIN-rail Power Supply (-10 ~ 60 degrees C)
PWR-480-48	480W 48V DC Single Output Industrial DIN-rail Power Supply (-25 ~ 70 degrees C)