Industrial L2+ 16-Port 10/100/1000T 802.3bt PoE + 4-Port 10G SFP+ Wall-mount Managed Ethernet Switch

TAIWAN EXCELLENCE 2026

Wall-mounted PoE++ Managed Switch with Advanced L2+ Switching and Security

PLANET WGS-5215 Series is an industrial wall-mount PoE+ managed switch line designed to enhance network reliability in industrial environments. The series includes two models—one equipped with an LCD touch screen (**WGS-5215-16UP4XV**) and one without—both featuring PLANET's intelligent PoE management functions to maximize system availability and operational efficiency.

It provides IPv6/IPv4 dual stack management, a built-in Layer 3 static routing capability, and a powerful L2+/L4 Gigabit switching engine along with **16 10/100/1000BASE-T** ports featuring **95-watt PoE**, and **four additional 100/1000/2500/10GBASE-X SFP ports**. With a total power budget of up to **720** watts for different kinds of PoE applications, and featuring networking speed and operating temperature ranging from **-40** to **75 degrees C** for the WGS-5215-16UP4X and from **-20** to **70 degrees C** for the WGS-5215-16UP4XV in a compact but rugged IP30 metal housing, the **WGS-5215-Series** is an ideal solution to meet the demand for harsh environments. The following pictures show how the WGS-5215-16UP4XV is user-friendly when it comes with installation and operations.

* The above pictures are for illustration only.

Physical Port

- **16 10/100/1000BASE-T** Gigabit Ethernet RJ45 ports with **IEEE 802.3bt PoE++** Injector function
- **4 100/1G/2.5G/10GBASE-X SFP+** slots for SFP type auto detection
- One USB Type C serial port (115200,8, N, 1) for basic management and setup

Industrial Case and Installation

- IP30 aluminum case
- Supports -20 to 70 degrees C operating temperature (WGS-5215-16UP4XV)
- Supports -40 to 75 degrees C operating temperature (WGS-5215-16UP4X)
- Supports ESD 6KV DC Ethernet protection
- Dual power input design
  - 48V~54V DC wide power input with reverse polarity protection
- Compact size with fixed wall-mounted design

Power over Ethernet

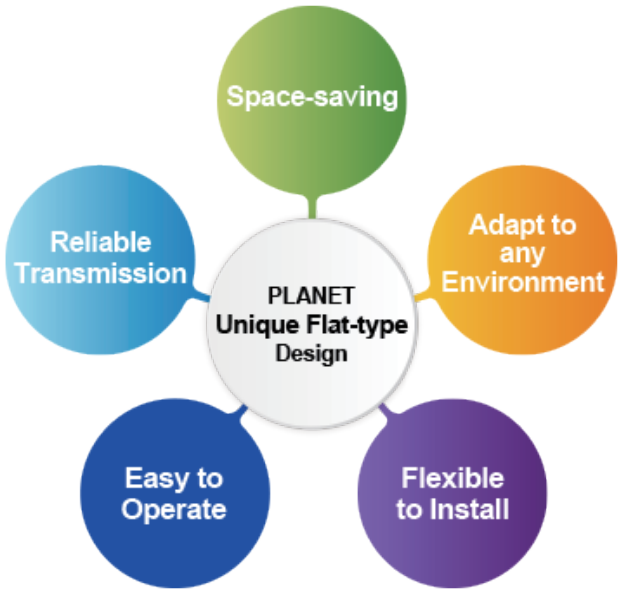
- Complies with IEEE 802.3bt Power over Ethernet Plus Type-4 PSE
- Backward compatible with IEEE 802.3af/at PD device
- Up to 16 IEEE 802.3af/802.3at/802.3bt PoE++ devices powered
- Supports PoE power up to 95 watts for each PoE port
- Total of 720-watt PoE budget
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100 meters in standard mode and 250 meters in extend mode
- Advanced PoE management capabilities:
  - Total PoE power budget control
  - Per port PoE function enable/disable
  - PoE port power feeding priority
  - Per PoE port power limitation
  - Detection of PD classification
- Intelligent PoE features
  - PD alive check
  - PoE schedule
  - Scheduled power recycling

Digital Input and Digital Output

- 2 Digital Input (DI)

Innovative Wall-mount Installation

The WGS-5215-Series is specially designed to be installed in a narrow environment, such as wall enclosure or electric box. The compact, flat and wall-mounted design fits easily in any space-limited location. The WGS-5215-Series can be installed by **fixed wall mounting**, thereby making its usability more flexible.



10Gbps Fiber Ports and Multiple Dual Speed Ports Deliver High-speed Networking

Featuring a **10Gbps uplink**, the **WGS-5215-Series** excels in connecting to both industrial backbones and high-capacity servers, demonstrating unmatched performance. It operates flawlessly across an extensive temperature range, guarantees a non-blocking switch fabric and delivers astonishing wire-speed throughput of up to **112Gbps**. The 10G fiber port serves as a backbone for high-bandwidth applications, such as video streaming, cloud computing, and virtualization, ensuring seamless and swift data transmission. This transformative capability simplifies the process of industrial LAN upgrades, efficiently catering to escalating bandwidth requirements.

802.3bt PoE++ 90~95-watt Power over 4-pair UTP Solution

As the **WGS-5215-Series** adopts the IEEE 802.bt PoE++ standard, it is capable to source up to 95 watts of power by using all the four pairs of standard Cat5e/6 Ethernet cabling to deliver power and full-speed data to each remote PoE compliant powered device (PD). It possesses triple amount of power capability than the conventional 802.3at PoE+ and is an ideal solution to satisfy the growing demand for higher power consuming network PDs, such as:

- PoE PTZ speed dome cameras
- Network devices
- Thin clients
- AIO (all-in-one) touch PCs, point of sale (POS) and information kiosks
- Remote digital signage displays
- PoE lightings

- 2 Digital Output (DO)
- Integrate sensors into auto alarm system
- Transfer alarm to IP network via system log and SNMP trap

Layer 3 IP Routing Features

- Supports maximum 32 static routes and route summarization
- Routing interface provides per VLAN routing mode

Layer 2 Features

- Supports VLAN
  - IEEE 802.1Q tagged VLAN
  - Provider bridging (VLAN Q-in-Q, IEEE 802.1ad) support
  - Protocol VLAN
  - Private VLAN (Protected port)
  - Management VLAN
  - GVRP
- Supports Spanning Tree Protocol
  - STP (Spanning Tree Protocol)
  - RSTP (Rapid Spanning Tree Protocol)
  - MSTP (Multiple Spanning Tree Protocol)
  - STP BPDU Guard, BPDU Filtering and BPDU Forwarding
- Supports Link Aggregation
  - IEEE 802.3ad Link Aggregation Control Protocol (LACP)
  - Cisco ether-channel (static trunk)
  - Maximum 8 trunk groups, up to 16 ports per trunk group
- Supports port mirror (many-to-1)
- Loop protection to avoid broadcast loops
- Supports ERPS (Ethernet Ring Protection Switching)
- Link Layer Discovery Protocol (LLDP)

Quality of Service

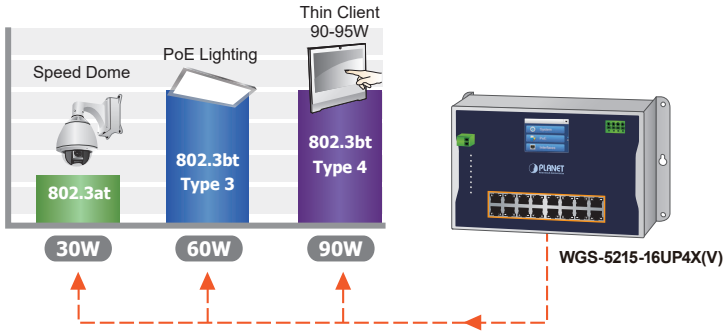
- Ingress and egress rate limit per port bandwidth control
- Storm control support
  - Broadcast/Unknown unicast/Unknown multicast
- Traffic classification
  - IEEE 802.1p CoS
  - TOS/DSCP/IP precedence of IPv4/IPv6 packets
- Strict priority and Weighted Round Robin (WRR) CoS policies

Multicast

- Supports IPv4 IGMP snooping v2 and v3
- Supports IPv6 MLD snooping v1, v2
- IGMP querier mode support
- IGMP snooping port filtering
- MLD snooping port filtering

Security

- Authentication
  - Built-in RADIUS client to cooperate with the RADIUS servers
  - RADIUS/TACACS+ login user access authentication
  - DHCP Option 82



Intuitive LCD Control (WGS-5215-16UP4XV only)

The WGS-5215-16UP4XV comes with an intuitive touch panel on its front panel that facilitates the Ethernet PoE PD management that greatly promotes 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

Cybersecurity Network Solution to Minimize Security Risks

The WGS-5215-Series supports SSHv2 and TLSv1.3 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, **RADIUS** and **TACACS+** user accounts management, **SNMPv3** authentication, and so on to complement it as an all-security solution.

- Access control list
  - IPv4/IPv6 IP-based ACL
  - IPv4/IPv6 IP-based ACE
  - MAC-based ACL
  - MAC-based ACE
- MAC security
  - Static MAC
  - MAC filtering
- Port security for source MAC address entries filtering
- 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
- DoS attack prevention

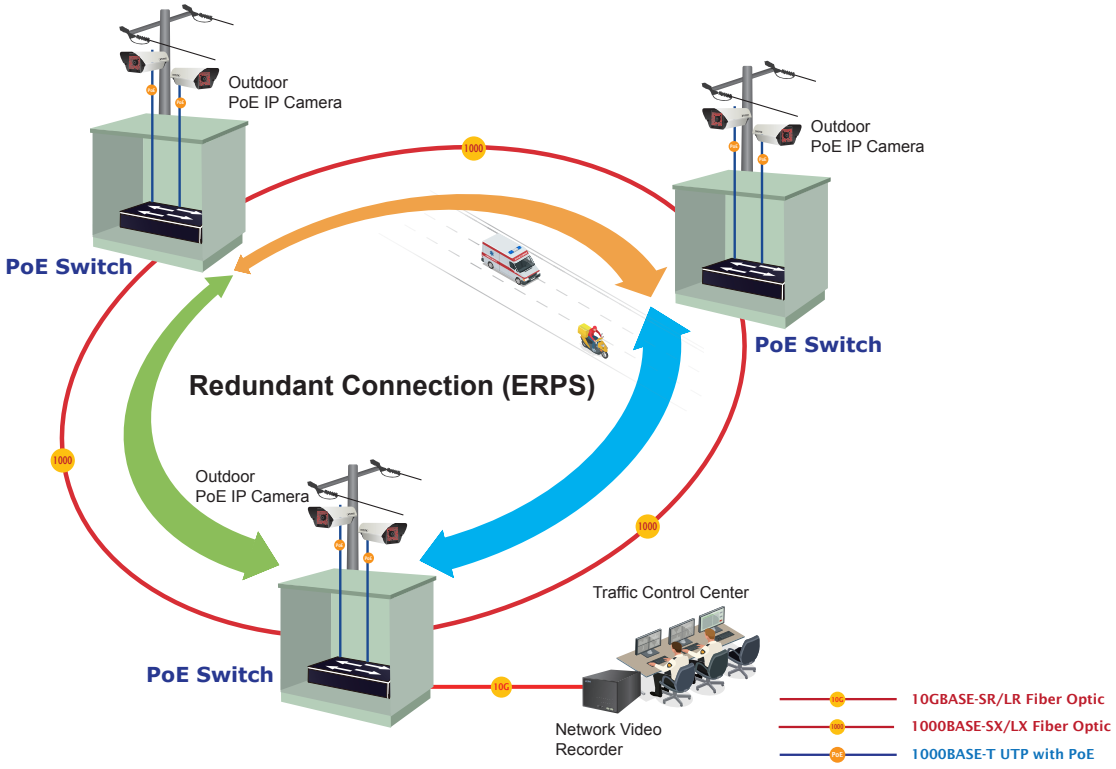
Management

- IPv4 and IPv6 dual stack management
- Switch management interface
  - Web switch management
  - Console and telnet command line interface
  - SNMP v1 and v2c switch management
  - SSHv2, TLSv1.3 and SNMP v3 secure access
  - 2.4-inch color LCD touch screen (WGS-5215-16UP4XV only)
- SNMP Management
  - Four RMON groups (history, statistics, alarms and events)
  - SNMP trap for interface link up and link down notification
- User privilege levels control
- Built-in Trivial File Transfer Protocol (TFTP) client
- Static and DHCP for IP address assignment
- System maintenance
  - Firmware upload/download via HTTP/TFTP
  - Configuration upload/download through HTTP/TFTP
  - Dual images
  - Hardware-based reset button for system reboot or reset to factory default
- SNTP Network Time Protocol
- Network Diagnostic
  - SFP-DDM (digital diagnostic monitor)
  - Cable diagnostics
  - ICMPv4/ICMPv6 remote ping
- Link Layer Discovery Protocol (LLDP) and LLDP-MED
- Event message logging to remote syslog server
- PLANET Smart Discovery Utility for deployment management
- PLANET NMS, NMSViewerPro and, CloudNMS for deployment management
- Provides ONVIF for co-operating with PLANET video IP surveillances

Redundant Ring, Fast Recovery for Critical Network Applications

The WGS-5215-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), and **dual power** input system into customer's industrial automation network to enhance system reliability and uptime in harsh factory environments.

ERPS Ring for Video Transmission Redundancy



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-5215-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.

Built-in Unique PoE Functions for Powered Devices Management

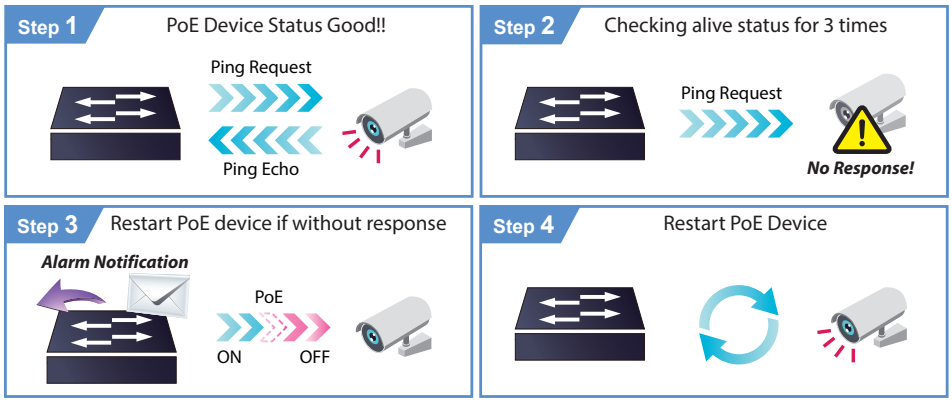
As it is the managed PoE++ switch for surveillance, wireless and VoIP networks, the WGS-5215-Series features the following special PoE management functions:

- PD alive check
- Scheduled power recycling
- PoE schedule
- PoE usage monitoring
- PoE extension

Intelligent Powered Device Alive Check

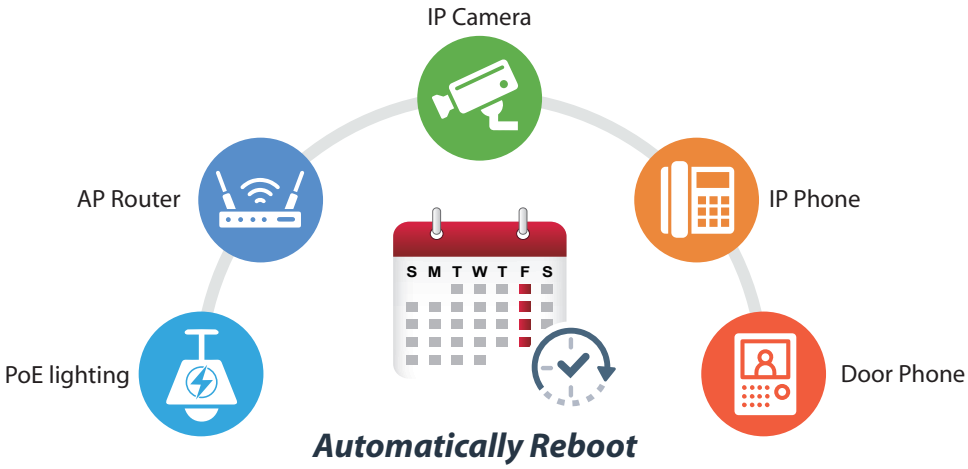
The WGS-5215-Series can be configured to monitor connected PD status in real time via ping action. Once the PD stops working and responding, the WGS-5215-Series will resume the PoE port power and bring the PD back to work. It will greatly enhance the network reliability through the PoE port resetting the PD's power source and reducing administrator management burden.

PD Alive Check



Scheduled Power Recycling

The WGS-5215-Series allows each of the connected PoE IP cameras or PoE wireless access points to reboot at a specific time each week. Therefore, it will reduce the chance of IP camera or AP crash resulting from buffer overflow.

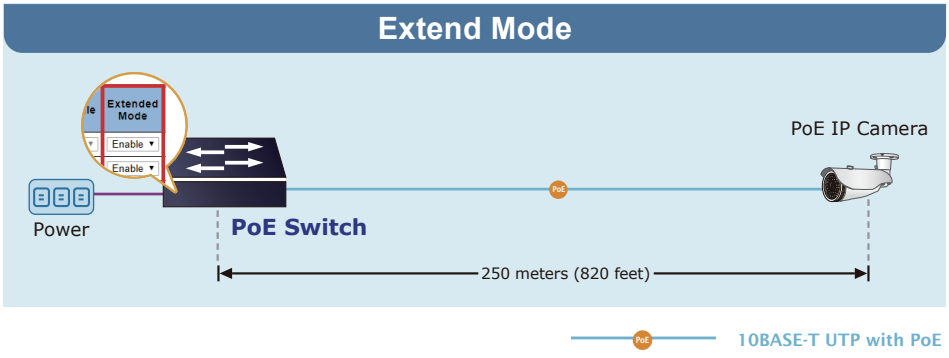


PoE Schedule for Energy Savings

Under the trend of energy savings worldwide and contributing to environmental protection, the WGS-5215-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 budget. It also increases security by powering off PDs that should not be in use during non-business hours.

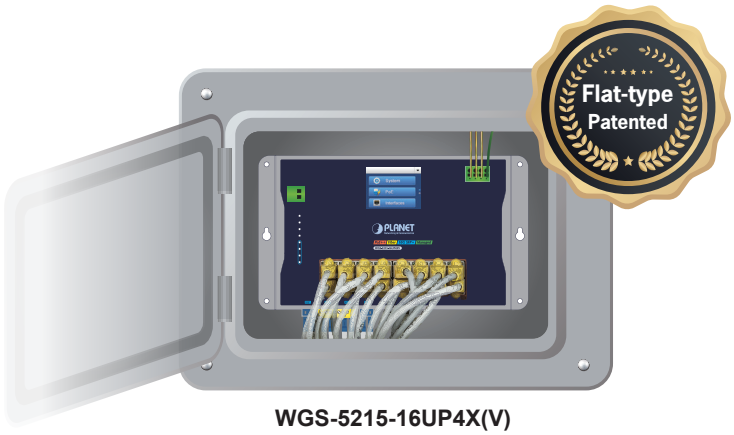
802.3bt PoE++ Power and Ethernet Data Transmission Distance Extension

In the "**Extend**" operation mode, the WGS-5215-Series, using a 54V DC power input, operates on a per-port basis at 10Mbps duplex operation but can support 53-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-5215-Series provides an additional solution for 802.3at/af PoE distance extension, thus saving the cost of Ethernet cable installation.



Innovative Wall-mount Installation with PLANET Flat-type Housing

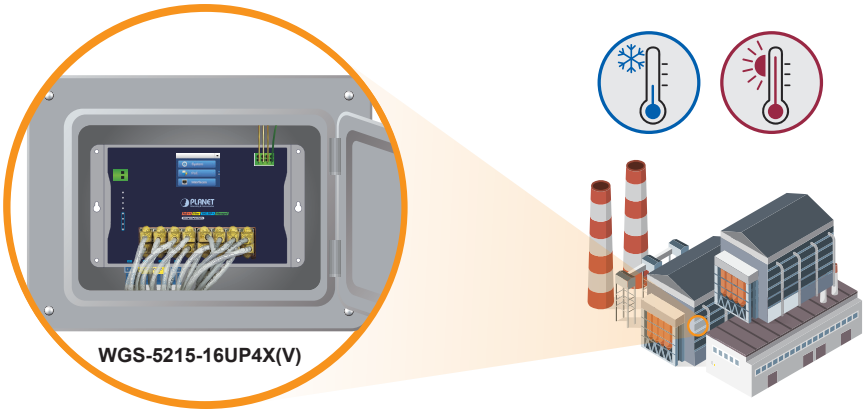
The WGS-5215-Series features PLANET's innovative **Flat-type housing**, specially designed for easy installation in narrow spaces such as wall enclosures, control cabinets, or flat junction boxes. Its compact, flat, and wall-mounted design fits perfectly in space-limited environments, while the user-friendly "Front Access" layout allows convenient installation, cable wiring, LED monitoring, and maintenance. The WGS-5215-Series can be securely mounted on any wall or cabinet surface, providing flexible and efficient deployment options for various industrial and enterprise applications.



WGS-5215-16UP4X(V)

Environmentally Hardened Design

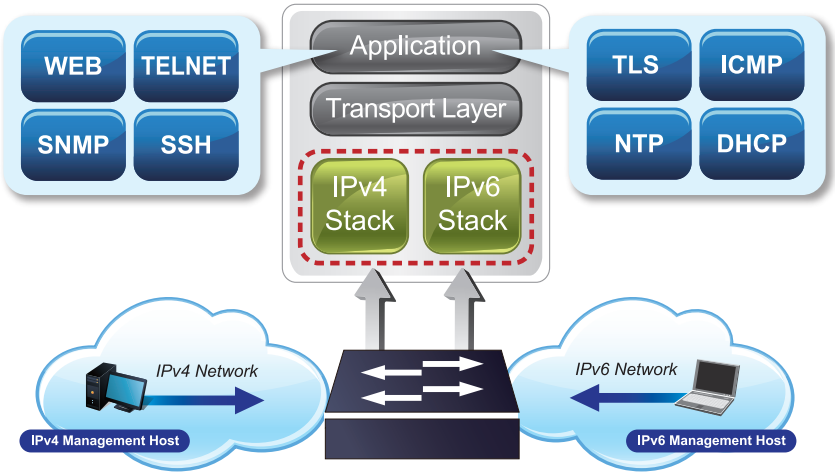
With IP30 flat yet rugged metal housing protection, the WGS-5215-Series provides a high level of immunity against electromagnetic interference and heavy electrical surges, which are usually found on plant floors or in curb-side traffic control cabinets without air conditioning. The WGS-5215-16UP4X can operate in a temperature range of **-40 to 75 degrees C**, while the WGS-5215-16UP4XV supports **-20 to 70 degrees C**, allowing the series to be deployed in almost any harsh environment.



WGS-5215-16UP4X(V)

IPv6/IPv4 Dual Stack Management

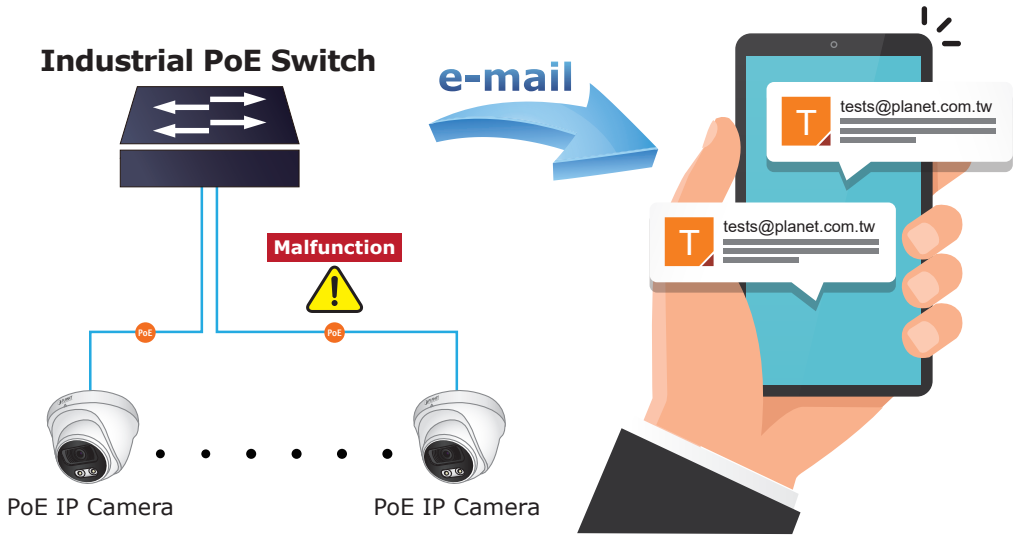
Supporting both IPv6 and IPv4 protocols, the WGS-5215-Series helps the SMBs to step in the IPv6 era with the lowest investment as its network facilities need not be replaced or overhauled if the IPv6 FTTx edge network is set up.



SMTP/SNMP Trap Event Alert

The WGS-5215-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.

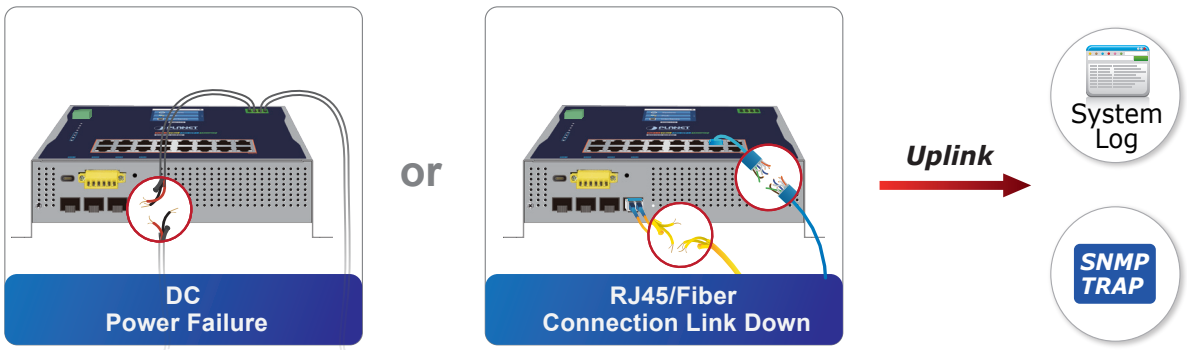
SMTP/SNMP Trap Event Alert



Effective Alarm Alert for Better Protection

The WGS-5215-Series supports a Fault Alarm feature which can alert the users when there is something wrong with the switches. With this ideal feature, the users would not have to waste time finding where the problem is. It will help to save time and human resource.

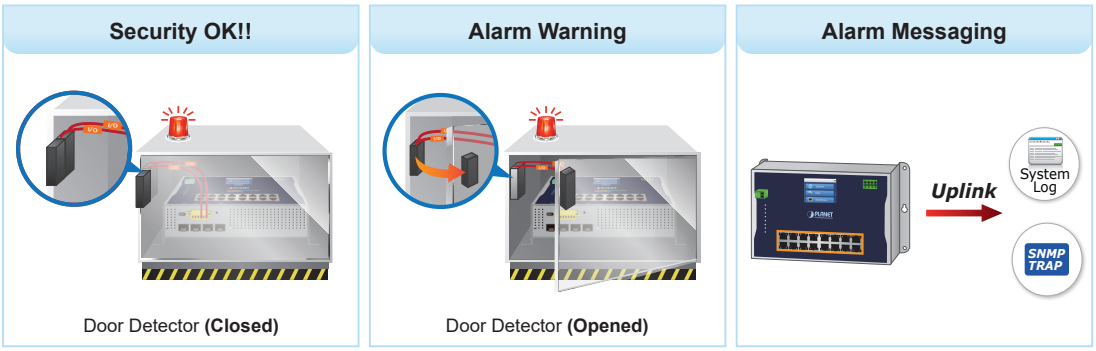
Fault Alarm Feature



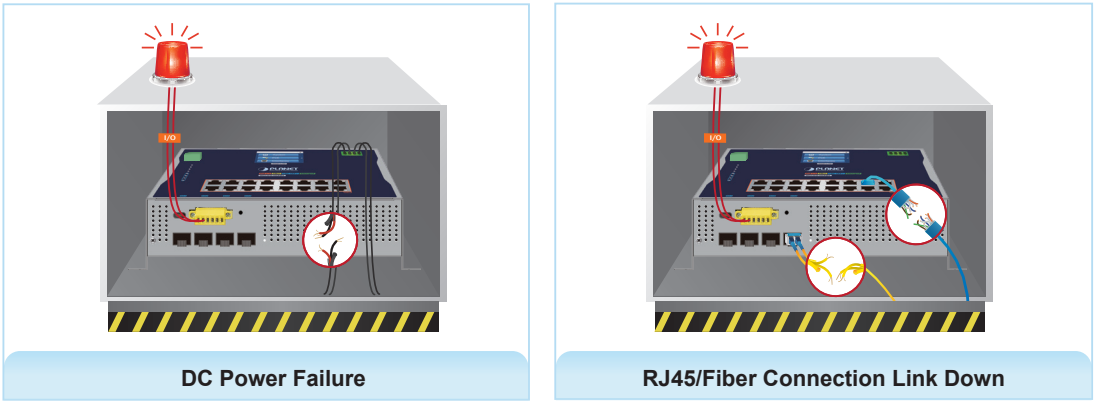
Digital Input and Digital Output for External Alarm

The WGS-5215-Series supports Digital Input and Digital Output on its upper panel. This external alarm enables users to use Digital Input to detect and log external device status (such as door intrusion detector), and send event alarm to the administrators. The Digital Output could be used to alarm the administrators if the WGS-5215-Series port shows link down, link up or power failure.

Digital Input



Digital Output



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

The WGS-5215-16UP4X and WGS-5215-16UP4XV not only provide ultra high transmission performance, and excellent Layer 2 and Layer 4 technologies, but also Layer 3 IPv4 and IPv6 VLAN routing feature which allows to cross over different VLANs and different IP addresses for the purpose of having a highly-secure, flexibly-managed and simple networking application.

Robust Layer 2 Features

The WGS-5215-Series can be programmed for advanced switch management functions such as dynamic port link aggregation, Q-in-Q VLAN, private VLAN, Rapid Spanning Tree Protocol, Layer 2 to Layer 4 QoS, bandwidth control and IGMP snooping. The WGS-5215-Series provides 802.1Q tagged VLAN, and the VLAN groups allowed will be maximally up to 2K. Via aggregation of supporting ports, the WGS-5215-Series allows the operation of a high-speed trunk combining multiple ports. It enables a maximum of up to **8** trunk groups with **16** ports per trunk group, and supports fail-over as well.

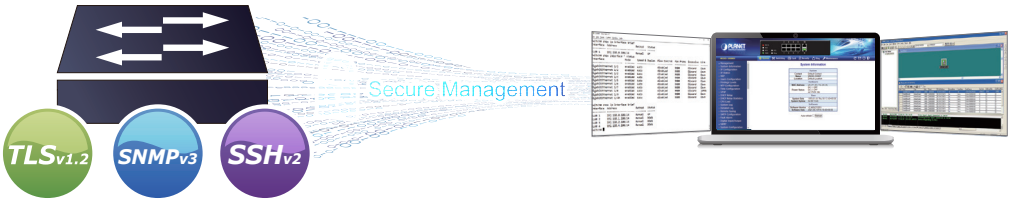
Efficient Traffic Control

The WGS-5215-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.

Efficient Management

For efficient management, the WGS-5215-Series is equipped with Command line, Web and SNMP management interfaces.

- With the built-in **Web-based** management interface, the WGS-5215-Series offers an easy-to-use, platform-independent management and configuration facility.
- For **text-based** management, it can be accessed via Telnet and the USB type C console port.
- For standard-based monitor and management software, it offers SNMPv3 connection which encrypts the packet content at each session for secure remote management.



PLANET CloudNMS – Cloud-Based Universal Network Management

PLANET's **CloudNMS** platform and mobile app empower IT staff to remotely manage all network devices and Powered Devices (PDs) in real time. Designed for enterprises and industries, CloudNMS minimizes the need for on-site troubleshooting by providing centralized monitoring, fault detection, and instant alerts. The WGS-5215 Series also supports **CloudNMS**, enabling businesses to manage diverse network deployments more efficiently, securely, and intelligently—all from a single cloud-based platform.

Powerful Security from Layer 2 to Layer 4

The WGS-5215-Series offers comprehensive 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** and **MAC-based** user and device authentication. With the **private VLAN** function, communication between edge ports can be prevented to ensure user privacy.

Advanced IP Network Protection

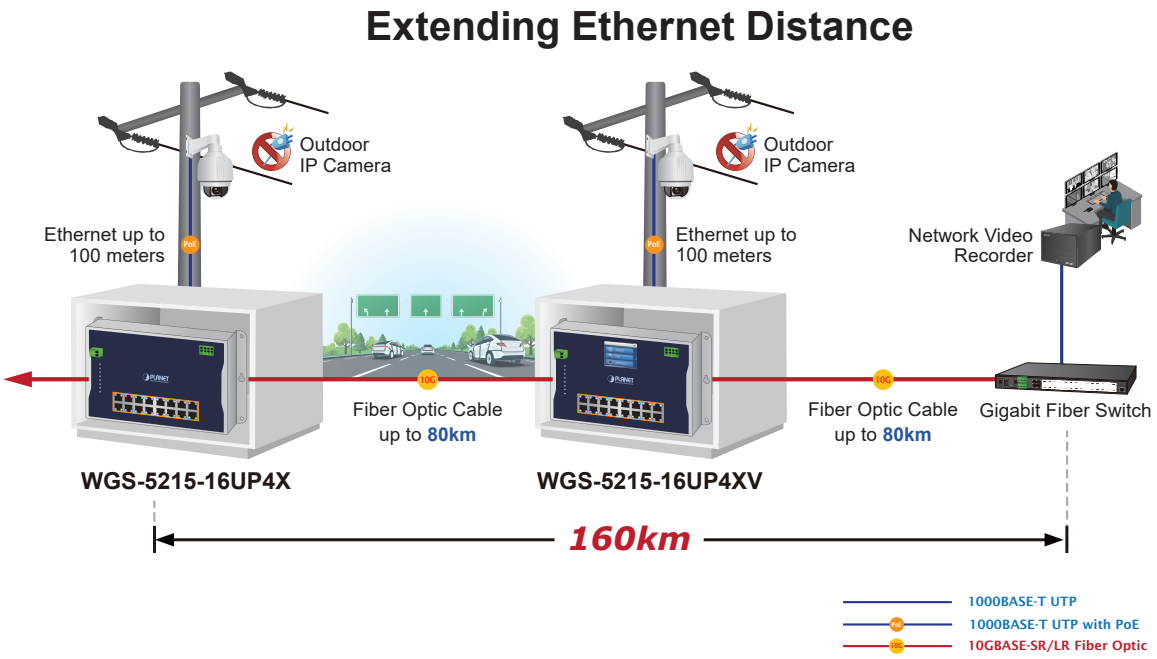
The WGS-5215-Series also provides **DHCP Snooping**, **IP Source Guard** and **Dynamic ARP Inspection functions** to prevent IP snooping from attack and discard ARP packets with invalid MAC address. The network administrators can now construct highly-secure corporate networks with considerably less time and effort than before.

Modbus TCP provides Flexible Network Connectivity for Factory Automation

With the supported **Modbus TCP/IP** protocol, the WGS-5215-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.

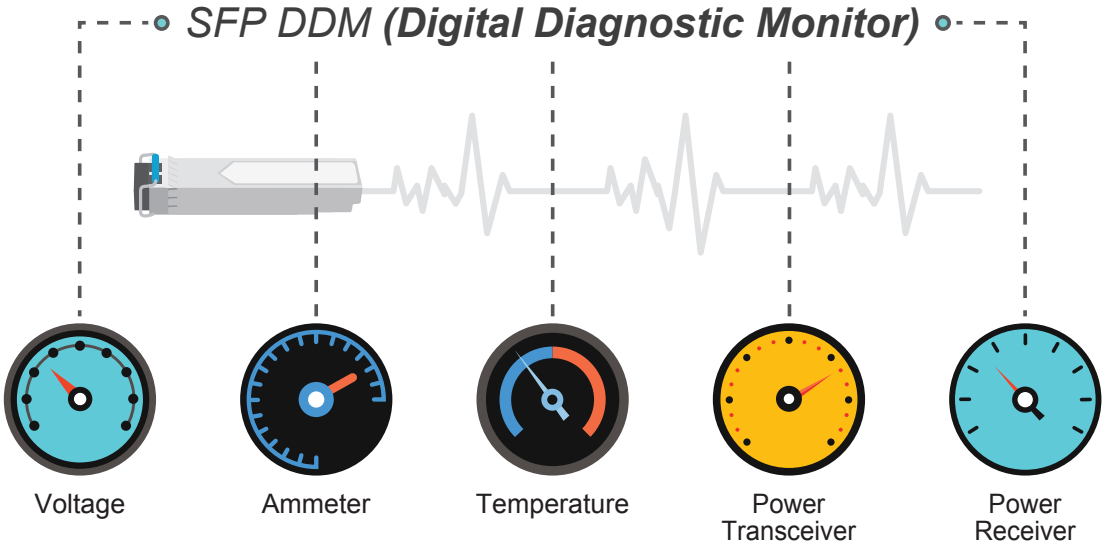
Flexibility and Extension Solution

The additional four SFP+ slots built in the WGS-5215-Series support multi-speed, **100BASE-FX**, **1GBASE-SX/LX**, **2.5GBASE-X and 10GBASE-X** SFP+ (Small Form-factor Pluggable) fiber-optic modules, meaning the administrator now can flexibly choose the suitable SFP transceiver according to not only the transmission distance but also the transmission speed required. The distance can be extended from 550 meters (multi-mode fiber) to 20/40/60 kilometers (single-mode fiber or WDM fiber). They are well suited for applications within the enterprise data centers and distributions.



Intelligent SFP Diagnosis Mechanism

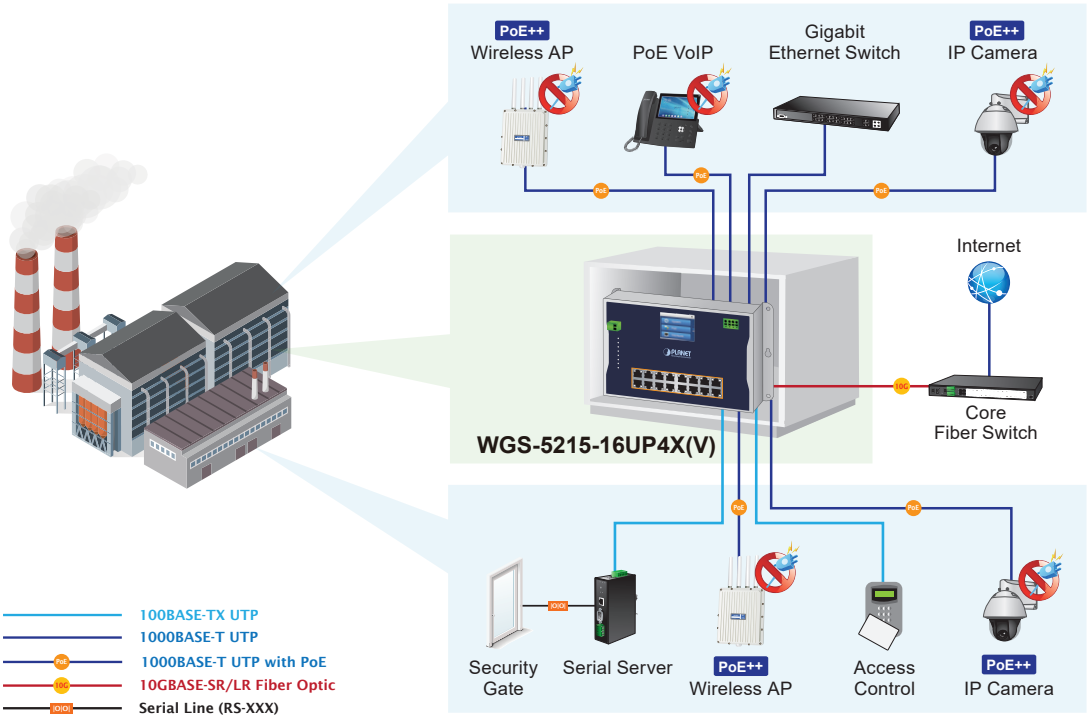
The WGS-5215-Series supports SFP-**DDM** (Digital Diagnostic Monitor) function that greatly helps network administrator to easily monitor real-time parameters of the SFP, such as optical output power, optical input power, temperature, laser bias current, and transceiver supply voltage.



Applications

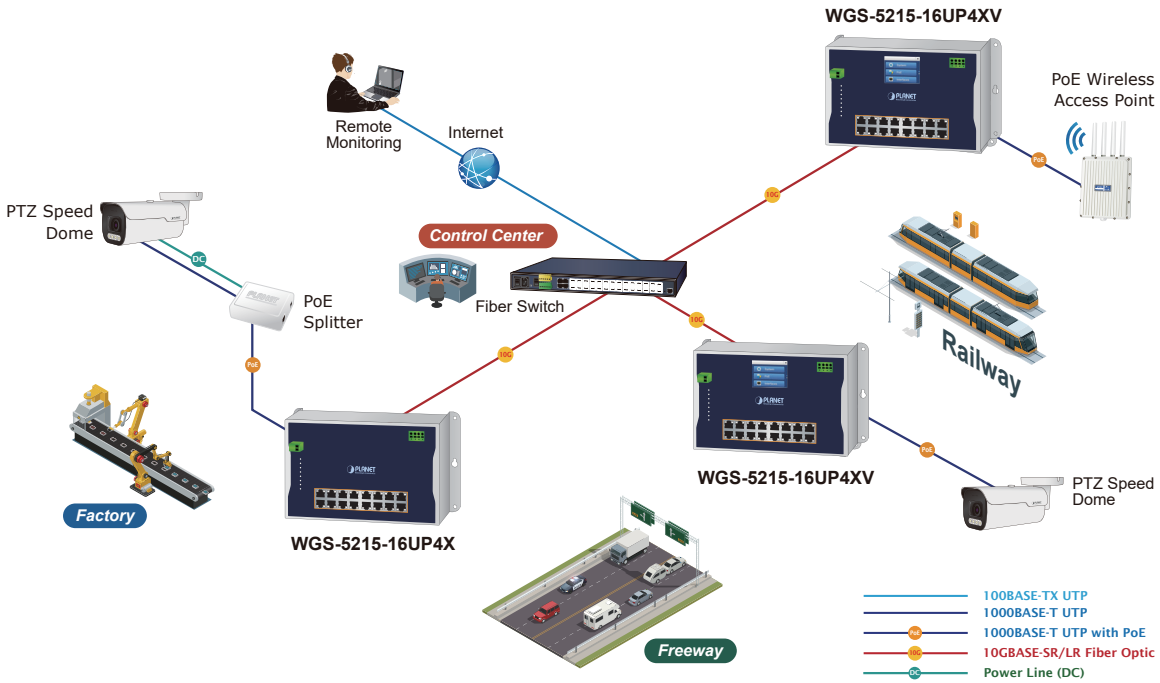
Security Building Automation Switch

Suitable for buildings where security is strictly to be enforced, the WGS-5215-Series 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-5215-Series, a tightly-controlled network can be easily had in no time.



Different Networks Managed by One Control Center

Providing up to 16 PoE++ in-line power interfaces, each port delivering up to 95 watts of output, the WGS-5215-Series can centrally manage power supplying to an industrial network system where IP phones, IP cameras, wireless APs and more are built. For instance, 16 PoE IP cameras or wireless access points can be easily installed around the corner in the industrial environment for surveillance demands or for a wireless roaming network. Without the power-socket limitation, the WGS-5215-Series makes the installation of IP cameras and wireless APs easier and more efficient.



Specifications

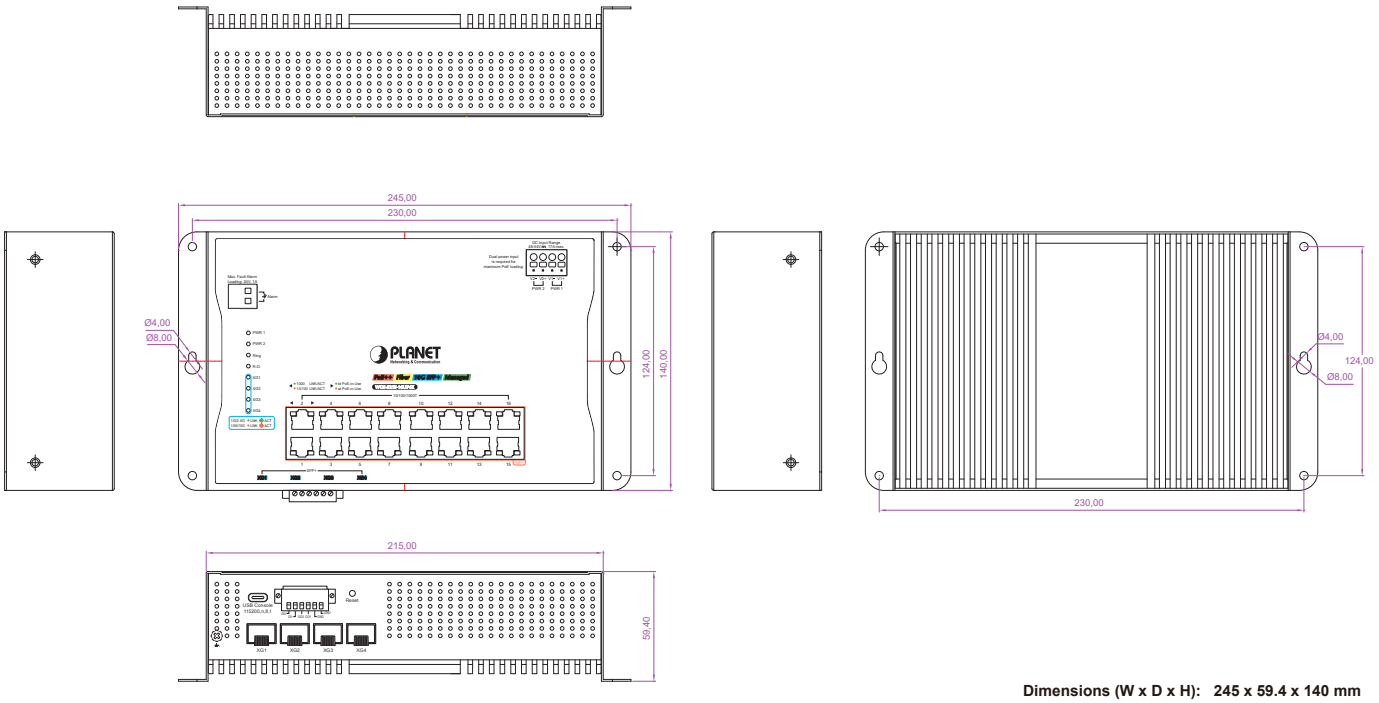
Product		WGS-5215-16UP4X	WGS-5215-16UP4XV
Hardware Specifications			
Copper Ports		16 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports	
SFP+ Slots		4 100/1G/2.5G/10GBASE-X SFP+ interfaces	
PoE Injector Port		16 ports with 802.3bt PoE++ injector function (Ports1 to 16)	
Console		1 x USB Type C serial port (115200, 8, N, 1)	
LCD Monitor		-	2.4-inch TFT color touchscreen
Reset Button		< 5 sec: System reboot > 5 sec: Factory Default	
Connector		4-pin terminal block for power input - Pin 1/2 for Power 1 (Pin 1: V+ / Pin 2: V-) - Pin 3/4 for Power 2 (Pin 3: V+ / Pin 4: V-)	
		2-pin terminal block for event alarm	
Alarm		One relay output for power failure. Alarm Relay current carry ability: 1A @ 24V DC	
DI/DO		2 Digital Input (DI): Level 0: -24V~2.1V (±0.1V) Level 1: 2.1V~24V (±0.1V) Input Load to 24V DC, 10mA max. 2 Digital Output (DO): Open collector to 24V DC, 100mA max.	
Enclosure		IP30 aluminum case	
Installation		Wall-mount	
Dimensions (W x D x H)		245 x 59.4 x 140 mm	
Weight		1768g	1793g
Power Requirements		48~54V DC (>52V DC for PoE+ and PoE++ output recommended) Dual power input is required for maximum power loading Maximum current 17A	
Power Consumption	System On	Max. 6.9 watts/23.5 BTU @48V DC input	Max. 7.1 watts/24.2 BTU @48V DC input
	Full Loading with PoE Function	Max. 772 watts/2632.5 BTU @Dual 54V DC input (720-watt PoE budget)	Max. 775 watts/2642.7 BTU @Dual 54V DC input (720-watt PoE budget)
ESD Protection		6KV DC	
LED Indicator		System: PWR 1(Green) PWR 2 (Green) Ring (Green) R.O. (Green) Per 10/100/1000T RJ45 PoE Port: 1000 LNK/ACT (Green) 10/100 LNK/ACT (Amber) bt PoE-in-Use (Green) at PoE-in-Use (Amber) Per SFP+ Interface: 1G/2.5G LNK/ACT (Green) 100/10G LNK/ACT (Amber)	
Switching Specifications			
Switch Architecture		Store-and-Forward	
Switch Fabric		112Gbps/non-blocking	
Throughput (packet per second)		83.3Mbps@ 64 bytes packet	
Address Table		32K entries, automatic source address learning and aging	
Shared Data Buffer		12Mbits	
Flow Control		IEEE 802.3x pause frame for full duplex	
Jumbo Frame		12Kbytes	
Reset Button		< 5 sec: System reboot > 5 sec: Factory default	
Power Over Ethernet			
PoE Standard		IEEE 802.3bt PoE++ PSE Backward compatible with IEEE 802.3at PoE PSE	
PoE Power Supply Type		End-span Mid-span BT	

PoE Power Output	■ Per port 54V DC ■ 802.3bt mode, Ports 1 to 16: maximum 95 watts ■ End-span mode: maximum 36 watts ■ Mid-span mode: maximum 36 watts
Power Pin Assignment	■ 802.3bt: 1/2(-), 3/6(+), 4/5(+), 7/8(-) ■ End-span: 1/2(-), 3/6(+) ■ Mid-span: 4/5(+), 7/8(-)
PoE Power Budget	Single power input: 360W maximum (depending on power input) Dual power input: 720W maximum (depending on power input) *Dual power input must be the same as DC voltage, like dual 54V
Number of 90W 802.3bt Type-4 PDs	8
Number of 60W 802.3bt Type-3 PDs	12
Number of 30W 802.3at Type-2 PDs	16
PoE Management Functions	
Enhanced PoE Mode	System PoE Admin Mode Consumption Mode/Allocation Mode Temperature Threshold
Enhanced PoE Mode	Standard/Legacy/Force
Active PoE Device Live Detection	Yes
PoE Power Recycling	Yes, daily or predefined schedule
PoE Schedule	4 schedule profiles
PoE Extended Mode	Yes, max. up to 250 meters
Layer 2 Function	
Port Mirroring	TX/RX/both Many-to-1 monitor Up to 4 sessions
VLAN	802.1Q tagged VLAN 802.1ad Q-in-Q tunneling (VLAN stacking) Protocol VLAN Private VLAN (Protected port) GVRP Management VLAN Up to 256 VLAN groups, out of 4094 VLAN IDs
Link Aggregation	IEEE 802.3ad LACP and static trunk Supports 8 groups with 16 ports per trunk
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) STP BPDU Guard, BPDU Filtering and BPDU Forwarding
IGMP Snooping	IPv4 IGMP snooping v2, v3 IGMP querier Up to 256 multicast groups
MLD Snooping	IPv6 MLD snooping v1, v2, up to 256 multicast groups
QoS	8 mapping IDs to 8 level priority queues - Port number - 802.1p priority - DSCP/IP precedence of IPv4/IPv6 packets Traffic classification based, strict priority and WRR Ingress/Egress Rate Limit per port bandwidth control
Ring	Supports ERPS, and complies with ITU-T G.8032 Recovery time < 450ms
Layer 3 Functions	
IP Interfaces	Max. 64 VLAN interfaces
Routing Table	Max. 32 routing entries
Routing Protocols	IPv4 hardware static routing IPv6 hardware static routing
Security Functions	
Access Control List	IPv4/IPv6 IP-based ACL/MAC-based ACL IPv4/IPv6 IP-based ACE/MAC-based ACE Max. 256 ACL entries
Port Security	Built-in RADIUS client to co-operate with RADIUS server RADIUS/TACACS+ user access authentication

MAC Security	IP-MAC port binding MAC filter Static MAC address, max. 256 static MAC entries	
Enhanced Security	DHCP Snooping and DHCP Option82 STP BPDU guard, BPDU filtering and BPDU forwarding DoS attack prevention ARP inspection IP source guard	
Management Functions		
Basic Management Interfaces	Console Web browser Telnet SNMP v1, v2c	
Secure Management Interfaces	SSHv2, TLS v1.3, SNMP v3	
System Management	Firmware upgrade by HTTP/TFTP protocol through Ethernet network Configuration upload/download through HTTP/TFTP LLDP protocol SNTP PLANET Smart Discovery Utility PLANET NMS, NMSViewerPro and CloudNMS	
Event Management	Remote/Local Syslog System log	
ONVIF	ONVIF device discovery ONVIF device monitoring Floor map	
LCD Management	--	■ 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
SNMP MIBs	RFC 1213 MIB-II RFC 1215 Generic Traps RFC 1493 Bridge MIB RFC 2674 Bridge MIB Extensions RFC 2737 Entity MIB (Version 2) RFC 2819 RMON (1, 2, 3, 9) RFC 2863 Interface Group MIB RFC 3635 Ethernet-like MIB RFC 3621 Power over Ethernet MIB RFC 4836 LLDP MIB	PLANET SNMP COMMON MANGEMENT Private MIB PLANET-DDMI-MIB PLANET-DIDO PLANET-Firmware-MIB PLANET-SYSUTIL-MIB PLANET-SMI PLANET-TC PLANET-GVRP-MIB PLANET-LACP-MIB
Standards Conformance		
Standards Compliance	FCC Part 15 Class A, CE	
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX/100BASE-FX IEEE 802.3z Gigabit SX/LX IEEE 802.3ab Gigabit 1000BASE-T IEEE802.3ae 10Gb/s Ethernet 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 802.1ab LLDP IEEE 802.3af Power over Ethernet	IEEE 802.3at Power over Ethernet Plus IEEE 802.3bt Power over Ethernet Plus Plus IEEE 802.3az for Energy-Efficient Ethernet RFC 768 UDP RFC 783 TFTP RFC 791 IP RFC 792 ICMP RFC 2068 HTTP RFC 1112 IGMP v1 RFC 2236 IGMP v2 RFC 3376 IGMP v3 RFC 2710 MLD v1 RFC 3810 MLD v2 ITU-T G.8032 ERPS Ring
Environment		
Operating Temperature	Temperature: -40 ~ 75 degrees C	Temperature: -20 ~ 70 degrees C
Storage Temperature	Temperature: -40 ~ 75 degrees C	Temperature: -20 ~ 70 degrees C
Humidity	Relative Humidity: 5 ~ 95% (non-condensing)	

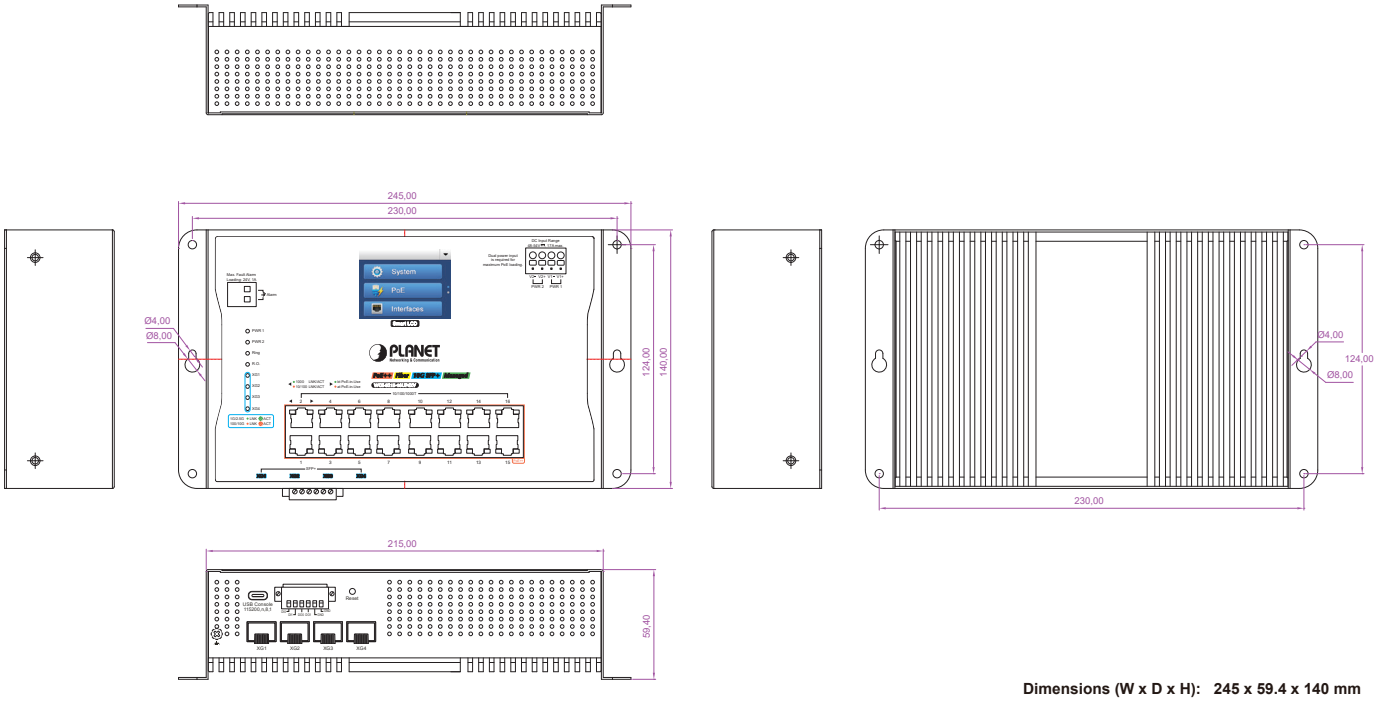
Dimensions

■ WGS-5215-16UP4X



Dimensions (W x D x H): 245 x 59.4 x 140 mm

■ WGS-5215-16UP4XV



Dimensions (W x D x H): 245 x 59.4 x 140 mm

Ordering Information

WGS-5215-16UP4X	Industrial L2+ 16-Port 10/100/1000T 802.3bt PoE + 4-Port 10G SFP+ Wall-mount Managed Ethernet Switch (-40~75 degrees C)
WGS-5215-16UP4XV	Industrial L2+ 16-Port 10/100/1000T 802.3bt PoE + 4-Port 10G SFP+ Wall-mount Managed Ethernet Switch with LCD Touch Screen (-20~70 degrees C)

Related Products

WGS-4215-8P2XV	Industrial L2+ 8-Port 10/100/1000T 802.3at PoE + 2-Port 10G SFP+ Wall-mount Managed Ethernet Switch with LCD Touch Screen (-20~70 degrees C)
WGS-4215-8P2X	Industrial L2+ 8-Port 10/100/1000T 802.3at PoE + 2-Port 10G SFP+ Wall-mount Managed Ethernet Switch (-40~75 degrees C)
WGS-4215-8HP2S	Industrial L2/L4 8-Port 10/100/1000T 802.3bt PoE + 2-Port 100/1000X SFP Wall-mount Managed Ethernet Switch
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
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-5225-8P2SV	Industrial L2 + 8-Port 10/100/1000T 802.3at PoE + 2-Port 100/1000X SFP Wall-mount Managed Switch with LCD Touch Screen
WGS-5225-8P2S	Industrial L2+ 8-Port 10/100/1000T 802.3at PoE + 2-Port 100/1000X SFP Wall-mount Managed Switch
WGS-5225-8T2SV	Industrial L2+ 8-Port 10/100/1000T + 2-Port 100/1000X SFP Wall-mount Managed Switch with LCD Touch Screen

Available Modules

10Gigabit Ethernet Transceiver

MTB-TSR	1-Port 10GBASE-SR SFP+ Fiber Optic Module - 300m (-40~85 degrees C)
MTB-TLR	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 10km (-40~85 degrees C)
MTB-TLR40	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 40km (-40~85 degrees C)
MTB-TSR2	1-Port 10GBASE-LR SFP+ Fiber Optic Module – 2km (-40~85 degrees C)
MTB-TLR20	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 20km (-40~85 degrees C)
MTB-TLR60	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 60km (-40~85 degrees C)
MTB-TLA20	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 20km (TX:1270nm RX:1330nm) (-40~85 degrees C)
MTB-TLB20	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 20km (TX:1330nm RX:1270nm) (-40~85 degrees C)
MTB-TLA40	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 40km (TX:1270nm RX:1330nm) (-40~85 degrees C)
MTB-TLB40	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 40km (TX:1330nm RX:1270nm) (-40~85 degrees C)
MTB-TLA60	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 60km (TX:1270nm RX:1330nm) (-40~85 degrees C)
MTB-TLB60	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 60km (TX:1330nm RX:1270nm) (-40~85 degrees C)
MTB-TRJ	1-Port 10GBASE-T SFP+ Copper Fiber Optic Module - 30m (-40~85 degrees C)
WGS-5225-8T2SV	Industrial L2+ 8-Port 10/100/1000T + 2-Port 100/1000X SFP Wall-mount Managed Switch with LCD Touch Screen

2.5Gigabit Ethernet Transceiver

MGB-2GTSR	2.5G SFP Transceiver (Multi-mode, 850nm, DDM, -40~85 degrees C) - 300m
MGB-2GTLA20	2.5G SFP Transceiver (Single mode WDM, TX:1310nm RX:1550nm, DDM, -40~85 degrees C) - 20km
MGB-2GTLB20	2.5G SFP Transceiver (Single mode WDM, TX:1550nm RX:1310nm, DDM, -40~85 degrees C) - 20km
MGB-2GTLR20	2.5G SFP Transceiver (Single mode, 1310nm, DDM, -40~85 degrees C) - 20km
MGB-2GTLR2	2.5G SFP Transceiver (Single mode, 1310nm, DDM, -40~85 degrees C) - 2km

Gigabit Ethernet Transceiver (1000BASE-X SFP)

MGB-TSX	SFP-Port 1000BASE-SX mini-GBIC module - 550m (-40~85 degrees C)
MGB-TSX2	SFP-Port 1000BASE-SX mini-GBIC module – 2km (-40~85 degrees C)
MGB-TLX	SFP-Port 1000BASE-LX mini-GBIC module - 20km (-40~85 degrees C)
MGB-TL40	SFP-Port 1000BASE-LX mini-GBIC module - 40km (-40~85 degrees C)
MGB-TL80	SFP-Port 1000BASE-LX mini-GBIC module - 80km (-40~85 degrees C)
MGB-TGT	SFP-Port 1000BASE-T Module – 100m (-40~85 degrees C)
MGB-TSA	SFP-Port 1000BASE-BX (WDM, TX:1310nm) mini-GBIC module - 2km (-40~85 degrees C)
MGB-TSB	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 2km (-40~85 degrees C)
MGB-TLA10	SFP-Port 1000BASE-BX (WDM, TX:1310nm) mini-GBIC module - 10km (-40~85 degrees C)
MGB-TLB10	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 10km (-40~85 degrees C)
MGB-TLA20	SFP-Port 1000BASE-BX (WDM, TX:1310nm) mini-GBIC module - 20km (-40~85 degrees C)
MGB-TLB20	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 20km (-40~85 degrees C)
MGB-TLA40	SFP-Port 1000BASE-BX (WDM, TX:1310nm) mini-GBIC module - 40km (-40~85 degrees C)
MGB-TLB40	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 40km (-40~85 degrees C)
MGB-TLA80	SFP-Port 1000BASE-BX (WDM, TX:1490nm) mini-GBIC module - 80km (-40~85 degrees C)
MGB-TLB80	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 80km (-40~85 degrees C)
MGB-TLA120	SFP-Port 1000BASE-BX (WDM, TX:1490nm) mini-GBIC module - 120km (-40~85 degrees C)
MGB-TLB120	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 120km (-40~85 degrees C)

MFB-Series Transceiver (100BASE-FX SFP)

MFB-TFX	SFP-Port 100BASE-FX Transceiver (1310nm) -2km (-40~85 degrees C)
MFB-TF20	SFP-Port 100BASE-FX Transceiver (1310nm) - 20km (-40~85 degrees C)
MFB-TF120	SFP-Port 100BASE -FX Transceiver (1550nm) - 120km (-40~85 degrees C)
MFB-TSA	SFP-Port 100BASE-BX (Multi-mode/WDM,TX:1310nm) mini-GBIC module-2km (-40~85 degrees C)
MFB-TSB	SFP-Port 100BASE-BX Transceiver (Multi-mode/WDM,TX:1550nm RX:1310nm / DDM) - 2km (-40~85 degrees C)
MFB-TFA20	SFP-Port 100BASE-BX (WDM, TX:1310nm) mini-GBIC module-20km (-40~85 degrees C)
MFB-TFB20	SFP-Port 100BASE-BX (WDM, TX:1550nm) mini-GBIC module-20km (-40~85 degrees C)
MFB-TFA40	SFP-Port 100BASE-BX (WDM, TX:1310nm) mini-GBIC module-40km (-40~85 degrees C)
MFB-TFB40	SFP-Port 100BASE-BX (WDM, TX:1550nm) mini-GBIC module-40km (-40~85 degrees C)
MFB-TFA60	SFP-Port 100BASE-BX (WDM, TX:1310nm) mini-GBIC module-60km (-40~85 degrees C)
MFB-TFB60	MFB-TFB60 SFP-Port 100BASE-BX (WDM, TX:1550nm) mini-GBIC module-60km (-40~85 degrees C)

Related Power Supply

PWR-75-48 (MEAN WELL -- XDR-75E-48):	75W 48V DC Single Output Industrial DIN-rail Power Supply (-40~ 70 degrees C)
PWR-120-48 (MEAN WELL -- XDR-120E-48):	120W 48V DC Single Output Industrial DIN-rail Power Supply (-40~ 70 degrees C)
PWR-240-48 (MEAN WELL -- XDR-240E-48):	240W 48V DC Single Output Industrial DIN-rail Power Supply (-40~ 70 degrees C)
PWR-480-48 (MEAN WELL -- XDR-480E-48):	480W 48V DC Single Output Industrial DIN-rail Power Supply (-40 ~ 70 degrees C)
PWR-960-48 (MEAN WELL -- XDR-960E-48):	960W 48V DC Single Output Industrial DIN-rail Power Supply (-40 ~ 70 degrees C)

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