

Industrial Flat-type L2/L4 Managed Gigabit PoE+ Switch



Easily-deployed and Expanded Network

Designed to be installed in a wall enclosure or simply mounted on a wall in any convenient location, PLANET WGS-4215 series, the innovative Industrial Flattype Managed Gigabit PoE+ Switch, offers IPv6/IPv4 dual stack management, intelligent Layer 2 management functions, and user-friendly interface. The WGS-4215 series is able to operate reliably, stably and quietly in any environment without affecting its performance. Featuring ultra networking speed and operating temperature ranging from -40 to 75 degrees C (-10 to 60 degrees C----WGS-4215-16P2S) in a compact but rugged IP30 metal housing, the WGS-4215 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 Name	WGS-804HPT	WGS-4215-8P2S	WGS-4215-16P2S
10/100/1000BASE-T Copper	8	8	16
100/1000BASE-X SFP	12	2	2
Power over Ethernet Standard	IEEE 802.3at PoE+	IEEE 802.3at PoE+	IEEE 802.3at PoE+
PoE Ports	4	8	16
PoE Budget	144 watts	200 watts	240 watts
Power Input	48~54V DC	48~54V DC	48~54V DC
Operating Temperature	-40~75°C	-40~75°C	-10~60°C

Cybersecurity Network Solution to Minimize Security Risks

The WGS-4215 series supports SSHv2 and TLSv1.2 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, 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

- 8/16 10/100/1000BASE-T Gigabit RJ45 copper ports
- · 2 100/1000BASE-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 4/8/16 ports of IEEE 802.3af/802.3at devices powered
- · 144-/200-/240-watt PoE budget
- · Supports PoE power up to 36 watts for each PoE port
- · 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
 - PD classification detection
- · Intelligent PoE features
 - PD alive check
 - PoE schedule

Industrial Case and Installation

- Compact size with fixed wall-mounted, magnetic wallmounted or DIN-rail design
- IP30 metal case
- · Supports industrial-grade, wide operating temperature
- · Supports ESD 6KV DC Ethernet protection
- · 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

- High performance Store and Forward architecture, broadcast storm control, runt/CRC filtering eliminates erroneous packets to optimize the network bandwidth
- · Supports VLAN
 - IEEE 802.1Q tagged VLAN
 - Provider Bridging (VLAN Q-in-Q) support (IEEE 802.1ad)
 - Protocol VLAN





Redundant Ring, Fast Recovery for Critical Network Applications

The WGS-4215 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.



Built-in Unique PoE Functions for Powered Devices Management

As it is the managed PoE switch for surveillance, wireless and VoIP networks, the WGS-4215 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-4215 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-4215 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



- Voice VLAN
- Private VLAN
- 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)
- · Provides port mirroring (many-to-1)
- · Loop protection to avoid broadcast loops
- · Supports ERPS (Ethernet Ring Protection Switching)
- · Link Layer Discovery Protocol (LLDP)

Quality of Service

- · Ingress/Egress Rate Limit per port bandwidth control
- · Traffic classification
 - IEEE 802.1p CoS
 - 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 v2, v3
- · Supports IPv6 MLD snooping v1, v2
- IGMP querier mode support
- · IGMP snooping port filtering
- · MLD snooping port filtering

Security

- Authentication
 - IEEE 802.1X Port-based network access authentication
 - Built-in RADIUS client to co-operate with the RADIUS servers
 - RADIUS/TACACS+ login user access authentication
- · 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



Scheduled Power Recycling

The WGS-4215 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.



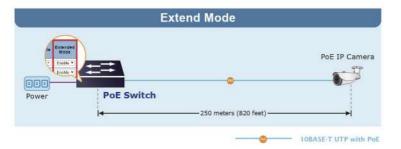
PoE Schedule for Energy Savings

Under the trend of energy saving worldwide and contributing to environmental protection, the WGS-4215 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.



802.3at PoE+ Power and Ethernet Data Transmission Distance Extension

In the "Extend" operation mode, the WGS-4215 series operates on a per-port basis at 10Mbps duplex operation but can support 20-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-4215 series provides an additional solution for 802.3at/af PoE distance extension, thus saving the cost of Ethernet cable installation.



- · 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
 - Telnet Command Line Interface
 - SNMP v1 and v2c switch management
 - SSHv2, TLSv1.2 and SNMP v3 secure access
- SNMP Management
 - SNMP trap for interface Link Up and Link Down notification
 - Four RMON groups (history, statistics, alarms and events)
- · 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 reset button for system reboot or reset to factory default
- · SNTP Network Time Protocol
- · Network Diagnostic
 - Cable diagnostics
 - ICMPv6/ICMPv4 Remote Ping
 - SFP-DDM (Digital Diagnostic Monitor)
- Link Layer Discovery Protocol (LLDP) Protocol and LLDP-MED
- · Event message logging to remote Syslog server
- PLANET Smart Discovery Utility for deployment management
- PLANET NMS system and CloudViewer for deployment management



Innovative Wall-mount Installation

The WGS-4215 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-4215 series placed in an enclosure very convenient for technicians. The WGS-4215 series can be installed by fixed wall mounting, magnetic wall mounting or DIN rail, thereby making its usability more flexible.

















Environmentally Hardened Design

With IP30, flat but rugged metal housing protection, the WGS-4215 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 (-10 to 60 degrees C----WGS-4215-16P2S), the WGS-4215 series can be placed in almost any difficult environment.

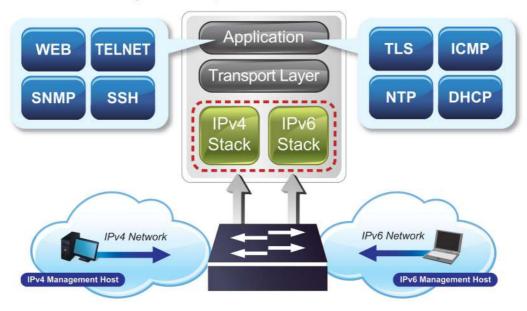


^{*} The above pictures are for illustration only.



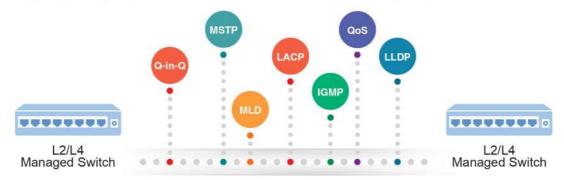
IPv6/IPv4 Dual Stack Management

Supporting both IPv6 and IPv4 protocols, the WGS-4215 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.



Robust Layer 2 Features

The WGS-4215 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-4215 series allows the operation of a high-speed trunk to combine with multiple ports such as a 16Gbps 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-4215 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 from Layer 2 to Layer 4

PLANET WGS-4215 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 limiting the number of network devices on a given port..

Advanced Network Security

The WGS-4215 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.



User-friendly and Secure Management

For efficient management, the WGS-4215 series is equipped with Command line, Web and SNMP management interfaces.

- With the built-in secure HTTPs **Web-based** management interface, the WGS-4215 series offers an easy-to-use, platform-independent management and configuration facility.
- For text-based management, it can be accessed via Telnet and SSHv2 protocols.
- For standard-based monitor and management software, it offers SNMPv3 connection which encrypts the packet content at each session for secure remote management.



Next-generation Remote Management Solution

PLANET's **Universal Network Management System** (UNI-NMS) and CloudViewer 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 app**, all kinds of businesses can now be speedily and efficiently managed from one platform.

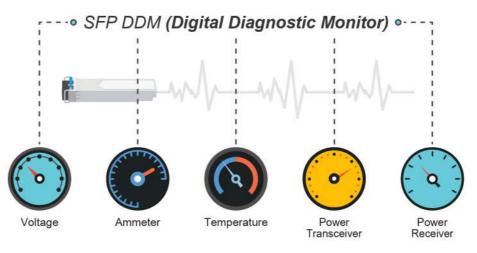


Flexible Long-distance Extension Solution

The WGS-4215-8P2S and WGS-4215-16P2S provide 2 additional dual-speed fiber SFP slots, and can also connect with the 100BASE-FX /1000BASE-SX/LX SFP (Small Form-factor Pluggable) fiber transceiver to uplink to backbone switch and monitoring center in long distance. The distance can be extended from 550 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-4215-8P2S and WGS-4215-16P2S support **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.





Applications

Industrial-grade PoE+ Switch for Building Automation and Security

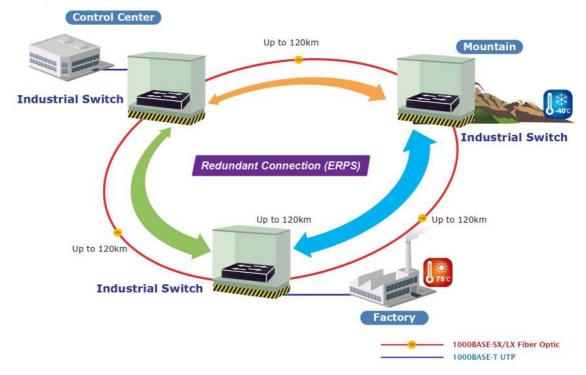
Suitable for buildings where security is strictly to be enforced, the WGS-4215 series, with up 4 to 16 802.3at PoE+, in-line power interfaces, can easily build a power centrally controlled for an IP phone system, IP surveillance system, and wireless AP group in the harsh Industrial environment.

For instance, multiple PoE IP cameras or PoE wireless APs can be easily installed for surveillance demands or a wireless roaming environment in the industrial area can be built. Without the power-socket limitation, the WGS-4215 series makes the installation of IP cameras or wireless APs easier and more efficient.



ITU-T G.8032 ERPS Makes Data Transmission Uninterrupted

The WGS-4215 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-4215 series can directly connect with any IEEE 802.3at end nodes like PTZ (pan, tilt, zoom) network cameras and speed dome cameras. The WGS-4215 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.





Specifications

Deadwat			WCS 804HDT	WCS 4245 9D26	WCS 4245 16D2S		
Product	Specificatio	00	WGS-804HPT	WGS-4215-8P2S	WGS-4215-16P2S		
laiuwaie	Specificatio	115	8	8	16		
Copper Po	orts				16		
			10/100/1000BASE-T RJ45 auto-MDI/M	30-10-102-4 00-00-00-0	-		
				2	2		
SFP Ports				1000BASE-SX/LX/BX SFP interfaces			
				Compatible with 100BASE-FX SFP			
PoE Inject	Port		4	8	16		
r oz mjoot	1 011		802.3af / 802.3at PoE injector function				
RAM			128Mbytes				
Flash Men	nory		16Mbytes				
D			< 5 sec: System reboot				
Reset Butt	ion		> 5 sec: Factory default				
			■ Removable 3-pin terminal block for p	ower input			
			- Pin 1/2 for Power (Pin 1: V+ / Pin 2:				
Connector			- Pin 3 for earth ground				
			■ DC power jack with 2.1mm central po	nle.			
			Bo power jack with 2. Illim bentual pe	48~54V DC, 5A (max.)	48~54V DC, 5.8A (max.)		
				48~54V DC, 5A (IIIax.)	46~54 V DC, 5.6A (IIIax.)		
Power Red	quirements		48~54V DC, 3A (max.)	Note: The his access to the face	Note: The two services in the first		
				Note: The two power input interfaces	Note: The two power input interfaces		
	WO WO THE STATE OF	(varyangon)		don't support power redundant function	don't support power redundant function		
	nsumption/	System On	2.7 watts/9.2 BTU	3.78 watts/12.8 BTU	7.02 watts/23.9 BTU		
Dissipation	1	PoE Full Loading	Max. 152 watts/519 BTU	Max. 210 watts/716 BTU	Max. 276 watts/941 BTU		
Dimension	is (W x D x I	H)	148 x 25 x 134 mm	178 x 25 x 134 mm	245 x 24.4 x 140 mm		
Weight			532g	640g	1090g		
Enclosure			Metal				
Installation	1		Wall mount, magnetic wall mount and [OIN-rail kit			
			Contact Discharge 6KV DC				
ESD Prote	ection		Air Discharge 8KV DC				
Surge Prot	tection		4KV DC				
Power LED			Power (Green)	Power (Green)			
			PoE-in-Use (Amber)	PoE-in-Use (Amber)	PoE-in-Use (Amber)		
	PoE Port		LNK/ACT (Green)	LNK/ACT (Green)	LNK/ACT (Green)		
	DoE Down	Usage LED	30W, 60W, 90W, 120W (Amber)	N/A	60W, 120W, 180W, 240W (Amber)		
	FOE FOWER	Usage LED		IV/A	6000, 12000, 18000, 24000 (AIRDEI)		
LED			10/100/1000BASE-TX Port (Port-5 to				
	LAN Port (I	Non-PoE)	Port-8):	N/A	N/A		
			- 1000 (Green)				
			- LNK/ACT (Green)				
	Fiber Port		N/A	1000 LNK/ACT (Green)	1000 LNK/ACT (Green)		
	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		10000	100 LNK/ACT (Amber)	100 LNK/ACT (Amber)		
Switching :	Specification	ns					
Switch Arc	chitecture		Store-and-Forward				
Switch Fat	bric		16Gbps/non-blocking	20Gbps/non-blocking	36Gbps/non-blocking		
Switch Thr	roughput@6	i4 bytes	11.9Mpps @64 bytes	14.8Mpps @64 bytes	26.78Mpps @64 bytes		
MAC Addr	ess Table		8K entries				
Shared Da	ata Buffer		4.1 megabits				
			IEEE 802.3x pause frame for full-duple	x			
Flow Contr	rol		Back pressure for half-duplex	550			
Jumbo Fra	me		10 Kbytes				
Power ove			10 Kbytes				
			IEEE 902 2af / 902 2at Dawer aver Eth	armet DCE			
PoE Stand			IEEE 802.3af / 802.3at Power over Eth	ernet PSE			
PoE Power Supply Type			End-span				
Power Pin	Assignmen		1/2(+), 3/6(-)				
PoE Powe	r Output	IEEE 802.3af	Per port 48V~51V DC, max. 15.4 watts	30			
	(Fe),	IEEE 802.3at	Per port 51V~54V DC, max. 36 watts				
PoE Powe	r Budget		144 watts maximum	200 watts maximum	240 watts maximum		
Max. Numl	ber of Class	2 PDs	4	8	16		
Max. Numl	ber of Class	3 PDs	4	8	16		
Max. Number of Class 3 PDs Max. Number of Class 4 PDs		4 PDs	4	7	9		
	per or Class						
Max. Numl	gement Fur	nctions					



PD Allev Check Scheduled Power Recycling PoE Schedule PoE Device Live Detection PoE Extension Active PoE Device Live Detection PoE Extension Active PoE Device Live Detection PoE Schedule PoE	Scheduler Power Recycling Poll Extension Active Poll Device Live Detection Poll Usage Monitoring Poll Extension Active Poll Device Live Detection Yes Poll Extension Poll Scheduler Poll Extension Poll Minroring TXXRXBoth Many to 1 monitor Up to 4 sessions Poll Annual Poll		
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Layer 2 Functions TX/RX/Both Many-to-1 monitor Up to 4 sessions 80:2 10 Lagged VLAN 80:2 1ad C4in-Q tunneling (VLAN stacking) Voice VLAN Protocol VLAN VGS-80-41P and VSS-42-15-82-5 Support 5 groups with 8 ports per trunk VGS-80-41P and VSS-42-15-82-5 Support 5 groups with 8 ports per trunk VGS-4215-16P2S: Supports 8 groups with 8 ports per trunk VGS-4215-16P2S: Supports 8 groups with 8 ports per trunk VGS-4215-16P2S: Supports 8 groups with 8 ports per trunk VGS-4215-16P2S: Supports 8 groups with 8 ports per trunk VGS-4215-16P2S: Supports 8 groups with 8 ports per trunk VGS-4215-16P2S: Supports 8 groups with 8 ports per trunk VGS-4215-16P2S: Supports 8 groups with 8 ports per trunk VGS-4215-16P2S: Supports 8 groups with 8 ports per trunk VGS-4215-16P2S: Supports 8 groups with 8 ports per trunk VGS-4215-16P2S: Supports 8 groups with 8 ports per trunk VGS-4215-16P2S: Supports 8 groups with 9 ports per trunk VGS-4215-16P2S: Supports 8 groups with 9 ports per trunk VGS-4215-16P2S: Supports 8 groups with 9 ports per ports per	Layer 2 Functions TX/RX/Both Many-to-1 monitor Up to 4 sessions 8.02.10 tagged VLAN 8.02.1at O-in-Q turneling (VLAN stacking) Voice VLAN Protocc VLAN Protocc VLAN Protocch VLAN Up to 255 VLAN groups, out of 4094 VLAN IDs IEEE 802.3ad LACP and states trunk VGS-804/HFT and VGS-421-58-25. Support 5 groups with 8 ports per trunk VGS-804/HFT and VGS-421-58-25. Support 5 groups with 8 ports per trunk VGS-421-51-6925. Supports 8 groups with 8 ports per trunk VGS-421-51-6925. Supports 8 groups with 8 ports per trunk VGS-804/HFT per Protocol RSTP, IEEE 802.1 May Indige Spanning Tree Protocol RSTP, IEEE 802.1 May Indige Spanning Tree Protocol STP PEPD Guard, BPDU Filtering and BPDU Forwarding IPV4 IGMP (v2Av) snooping values - Port Number - 802.1 priority - 802 priority queues - 802.1 priority - 802 priority queues - 802.1 priority - 802 priority protocol Ring Security Functions Ring Security Functions IPV4IPV6 IP-based ACLMAC-based ACL IMX-256 ACL entries IPV4IPV6 IPV-Based ACLMAC-based ACL IMX-256 ACL entries Buille RADIUS client to cooperate with RADIUS server RADIUSTACAACS* user access authentication IPVAIPV6 IPV-Based ACLMAC-based ACL IMX-256 ACL entries Buille RADIUS client to cooperate with RADIUS server RADIUSTACAACS* user access authentication IPVAIPV6 IPV-Based ACLMAC-based ACL IMX-256 ACL entries DHCP Snooping and DHCP Option82 Enhanced Security Wab browser Fallent Interfaces Wab browser Fallent Interfaces NMB VI V. Voc	PoE Schedule	4 schedule profiles
Port Mirroring	TXRX/Beth Many 16-1 monitor Up to 4 sessions 802.10 lagged VLAN 802.14 Car - Chumeling (VLAN stacking) Volos VLAN Protocol VLAN VGS.80418-19 IEEE 802.31 LACP and static trunk VGS.8215-18P2S: Supports 8 groups with 8 ports per trunk VGS.8215-18P2S: Supports per trunk VGS.8215-18P2S: Supports per trunk VGS.8215-18P2S: Support	PoE Extend Mode	Yes, up to 250 meters, max.
Port Mirroring	TXRX/Beth Many 16-1 monitor Up to 4 sessions 802.10 lagged VLAN 802.14 Car - Chumeling (VLAN stacking) Volos VLAN Protocol VLAN VGS.80418-19 IEEE 802.31 LACP and static trunk VGS.8215-18P2S: Supports 8 groups with 8 ports per trunk VGS.8215-18P2S: Supports per trunk VGS.8215-18P2S: Supports per trunk VGS.8215-18P2S: Support	Layer 2 Functions	The state of the contract of the state of th
Port Mirroring	Many-to-1 monitor		TX/RX/Both
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Vican VLAN Protocol VLAN	VLAN Protocol VLAN Proto		
Protocol VLAN Private VLAN (Protected port) GVRP Management VLAN Protected port) GVRP Management VLAN Up to 256 VLAN groups, out of 4094 VLAN IDs	Protocol VLAN Private VLAN (Protected port) GVRP Management VLAN Up to 256 VLAN groups, out of 4094 VLAN IDs IEEE 802.3 and LACP and static trunk WGS-804HPT and VIGS-4215-8P25: Support 5 groups with 8 ports per trunk WGS-804HPT and VIGS-4215-8P25: Support 5 groups with 8 ports per trunk WGS-804HPT and VIGS-4215-8P25: Support 5 groups with 8 ports per trunk RGS-4215-16P25: Support 6 groups with 8 ports per trunk Spanning Tree Protocol RTP, IEEE 802.1 Na Pagis Spanning Tree Protocol RTP, IEEE 802.1 Na Pagis Spanning Tree Protocol RTP, IEEE 802.1 Na Multiple Spanning Tree Protocol STP BPDU Guard, BPDU Filtering and BPDU Forwarding IP44 IGMP (v2/v3) snooping IGMP Snooping IP44 IGMP (v2/v3) snooping IGMP querier Up to 256 multicast groups ### IGMP QUART SPANNING PROTOCOLOR ###		
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- 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 Security Functions IPv4/IPv6 IP-based ACL/MAC-based ACL Access Control List IPv4/IPv6 IP-based ACE/MAC-based ACE Max. 256 ACL entries IEEE 802.1X – Port-based authentication 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 DHCP Snooping and DHCP Option82 STP BPDU guard, BPDU filtering and BPDU forwarding DoS attack prevention ARP inspection	- 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 Security Functions IPv4/IPv6 IP-based ACL/MAC-based ACL IPv4/IPv6 IP-based ACE/MAC-based ACE Max. 256 ACL entries IEEE 802.1X − Port-based authentication Built-in RADIUS client to co-operate with RADIUS server RADIUs/TACACS+ user access authentication IP-MAC port binding MAC Security MAC filter Static MAC address, max. 256 static MAC entries DHCP Snooping and DHCP Option82 STP BPDU guard, BPDU filtering and BPDU forwarding Dos attack prevention ARP inspection IP source guard Management Functions Web browser Telnet SNIMP v1, v2c		- Port Number
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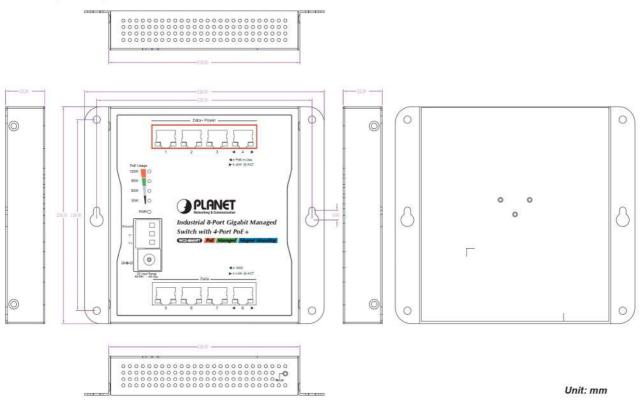
	Firmware upgrade by HTTP/HTTPS/TFTP protocol thro				
	Configuration upload/download through HTTP/HTTPS/	FTP			
System Management	LLDP protocol				
zyotom managamani	SNTP				
	PLANET Smart Discovery Utility				
	PLANET NMS System/CloudViewer				
Event Management	Remote/Local Syslog				
zvent management	System log				
	RFC 1213 MIB-II				
	RFC 1215 Generic Traps				
	RFC 1493 Bridge MIB				
	RFC 2674 Bridge MIB Extensions				
SNMP MIBs	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 Ethernet MIB				
Standards Conformance					
	FCC Part 15 Class A				
Regulatory Compliance	EN 55032				
togalate.) Compilation	EN 55035				
	ICES-003 issue 7				
	IEC 60068-2-32 (free fall)				
Stability Testing	IEC 60068-2-27 (shock)				
	IEC 60068-2-6 (vibration)				
	IEEE 802.3 10BASE-T	IEEE 802.3at Power over Ethernet Plus			
	IEEE 802.3u 100BASE-TX/100BASE-FX	IEEE 802.3az for Energy-Efficient Ethernet			
	IEEE 802.3z Gigabit SX/LX	RFC 768 UDP			
	IEEE 802.3ab Gigabit 1000BASE-T	RFC 793 TFTP			
	IEEE 802.3x Flow Control and Back Pressure	RFC 791 IP			
	IEEE 802.3ad Port Trunk with LACP	RFC 792 ICMP			
Standards Compliance	IEEE 802.1D Spanning Tree Protocol	RFC 2068 HTTP			
	IEEE 802.1w Rapid Spanning Tree Protocol	RFC 1112 IGMP v1			
	IEEE 802.1s Multiple Spanning Tree Protocol	RFC 2236 IGMP v2			
	IEEE 802.1p Class of Service RFC 3376 IGMP v3				
	IEEE 802.1Q VLAN Tagging RFC 2710 MLD v1				
	IEEE 802.1x Port Authentication Network Control RFC 3810 MLD v2				
	IEEE 802.1ab LLDP	ITU G.8032 ERPS Ring			
	IEEE 802.3af Power over Ethernet				
Standards Conformance		1 (as y constant or or or or			
Operating Temperature	-40 ~ 75 degrees C	-10 ~ 60 degrees C			
Storage Temperature	-40 ~ 85 degrees C	-40 ~ 85 degrees C			
Humidity	5 ~ 95% (non-condensing)				



Dimensions

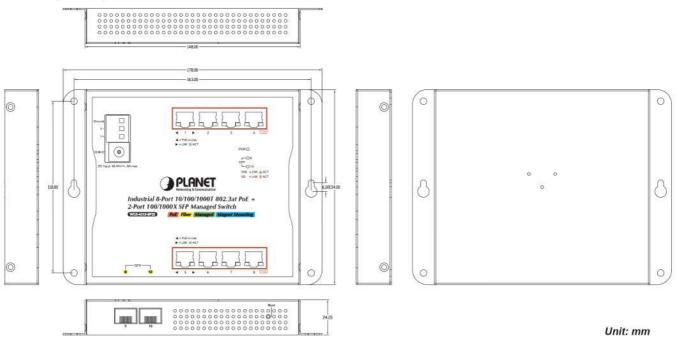
WGS-804HPT

■ Dimensions (W x D x H) : 148 x 25 x 134mm



WGS-4215-8P2S

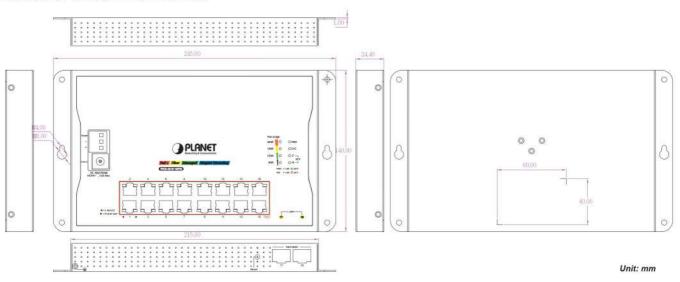
■ Dimensions (W x D x H) : 178 x 25 x 134mm





WGS-4215-16P2S

■ Dimensions (W x D x H): 245 x 24.4 x 140mm



Ordering Information

WGS-804HPT	Industrial 8-Port 10/100/1000T Wall-mounted Managed Switch with 4-Port PoE+
WGS-4215-8P2S	Industrial 8-Port 10/100/1000T 802.3at PoE + 2-Port 100/1000X SFP Wall-mount Managed Switch
WGS-4215-16P2S	Industrial 16-Port 10/100/1000T 802.3at PoE+ 2-Port 100/1000X SFP Wall-mounted Managed Switch

Related Products

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)
WGS-4215-8HP2S	Industrial 4-Port 10/100/1000T 802.3bt PoE + 4-Port 10/100/1000T 802.3at PoE + 2-Port 100/1000X SFP Wall-mount Managed Switch (-40~75 degrees C)
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 8-port 10/100/1000T 802.3at PoE + 2-port 1G/2.5G SFP Wall-mount Managed Switch with LCD Touch Screen
WGS-5225-8P2S	Industrial 8-port 10/100/1000T 802.3at PoE + 2-port 1G/2.5G SFP Wall-mount Managed Switch
WGS-804HP	8-Port 10/100/1000T Wall Mounted Gigabit Ethernet Switch with 4-Port PoE+
WGS-814HP	Industrial 8-Port 10/100/1000T Wall-mounted Gigabit Switch with 4-port PoE+
WGS-818HP	Industrial 8-Port 10/100/1000T Wall-mounted Gigabit PoE+ Switch

Available Gigabit SFP Modules

Gigabit Ethernet Transceiver (1000BASE-X SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (nm)	Operating Temp.
MGB-GT	1000	Copper		100m	5 	0 ~ 60 degrees C
MGB-TSX	1000	LC	Multi Mode	550m	850nm	-40 ~ 75 degrees C
MGB-TLX	1000	LC	Single Mode	10km	1310nm	-40 ~ 75 degrees C
MGB-TL30	1000	LC	Single Mode	30km	1310nm	-40 ~ 75 degrees C
MGB-TL70	1000	LC	Single Mode	70km	1550nm	-40 ~ 75 degrees C



Gigabit Ethernet Transceiver (1000BASE-BX, Single Fiber Bi-directional SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (TX)	Wavelength (RX)	Operating Temp.
MGB-TLA10	1000	WDM(LC)	Single Mode	10km	1310nm	1550nm	-40 ~ 75 degrees C
MGB-TLB10	1000	WDM(LC)	Single Mode	10km	1550nm	1310nm	-40 ~ 75 degrees C
MGB-TLA20	1000	WDM(LC)	Single Mode	20km	1310nm	1550nm	-40 ~ 75 degrees C
MGB-TLB20	1000	WDM(LC)	Single Mode	20km	1550nm	1310nm	-40 ~ 75 degrees C
MGB-TLA40	1000	WDM(LC)	Single Mode	40km	1310nm	1550nm	-40 ~ 75 degrees C
MGB-TLB40	1000	WDM(LC)	Single Mode	40km	1550nm	1310nm	-40 ~ 75 degrees C
MGB-TLA60	1000	WDM(LC)	Single Mode	60km	1310nm	1550nm	-40 ~ 75 degrees C
MGB-TLB60	1000	WDM(LC)	Single Mode	60km	1550nm	1310nm	-40 ~ 75 degrees C

Available Fast Ethernet SFP Modules

Fast Ethernet Transceiver (100BASE-X SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (nm)	Operating Temp.
MFB-TFX	100	LC	Multi Mode	2km	1310nm	-40 ~ 75 degrees C
MFB-TF20	100	LC	Single Mode	20km	1550nm	-40 ~ 75 degrees C

Fast Ethernet Transceiver (100BASE-BX, Single Fiber Bi-directional SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (TX)	Wavelength (RX)	Operating Temp.
MFB-TFA20	100	WDM(LC)	Single Mode	20km	1310nm	1550nm	-40 ~ 75 degrees C
MFB-TFB20	100	WDM(LC)	Single Mode	20km	1550nm	1310nm	-40 ~ 75 degrees C
MFB-TFA40	100	WDM(LC)	Single Mode	40km	1310nm	1550nm	-40 ~ 75 degrees C
MFB-TFB40	100	WDM(LC)	Single Mode	40km	1550nm	1310nm	-40 ~ 75 degrees C

Tel: 886-2-2219-9518 Email: sales@planet.com.tw Fax: 886-2-2219-9528 www.planet.com.tw

