Industrial Wall-mount Managed Gigabit Ethernet Switch

WGS-804HPT/WGS-4215-8T/WGS-4215-8T2S WGS-4215-8P2S/WGS-4215-8HP2S/WGS-4215-16P2S

Quick Installation Guide

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1. Package Contents

Thank you for purchasing PLANET Industrial Wall-mount Managed Gigabit Switch, WGS-804HPT or WGS-4215 series. The table below shows the models with the number of ports:

Model Name	10/100/1000T Copper Ports	PoE Ports	100/1000 SFP Fiber Optic Interface	10G SFP+ Fiber Optic Interface
WGS-804HPT	8	4 PoE+	-	-
WGS-4215-8T	8	-	-	-
WGS-4215-8T2S	8	-	2	-
WGS-4215-8P2S	8	8 PoE+	2	-
WGS-4215-8HP2S	8	8 PoE++	2	-
WGS-4215-16P2S	16	16 PoE+	2	-

In the following sections, unless specified, the term **"Wall-mount Managed Switch"** mentioned in this quick installation guide refers to the above models. Open the box of the Wall-mount Managed Switch and carefully unpack it. The box should contain the following items:



If any item is found missing or damaged, please contact your local reseller for replacement.

2. Requirements

- **Workstations** running Windows 7/8/10/11, macOS 10.12 or later, Linux Kernel 2.6.18 or later, or other modern operating systems are compatible with TCP/IP Protocols.
- Workstations are installed with **Ethernet NIC** (Network Interface Card).

• Ethernet Port Connection

- > Network cables -- Use standard network (UTP) cables with RJ45 connectors.
- > The above PC is installed with **Web browser**.



It is recommended to use Google Chrome, Microsoft Edge or Firefox to access the Wall-mount Managed Switch. If the Web interface of the Wallmount Managed Switch is not accessible, please turn off the anti-virus software or firewall and then try it again.

> The Workstations above have been installed with **SSH** and telnet client software, such as Tera Term or PuTTY.

• A flat-blade screwdriver

For the WGS-4215-8HP2S to connect the power cable to the terminal block.

3. Wiring the Power Inputs

The Wall-mount Managed Switch features a strong dual power input system (terminal block and DC jack) incorporated into customer's automation network to enhance system reliability and uptime.

Power Input Range Model	3/4-pin Terminal Block	DC Jack
WGS-4215-8T	12~48V DC, 24V AC	12~48V DC, 24V AC
WGS-4215-8T2S	12~48V DC, 24V AC	12~48V DC
WGS-804HPT	48~54V DC	48~54V DC
WGS-4215-8P2S	48~54V DC	48~54V DC
WGS-4215-8HP2S	48~54V DC	-
WGS-4215-16P2S	48~54V DC	48~54V DC



Maximum power requirements also depend on the actual site application.

Gigabit 802.3at PoE+ Port 0 Ο PoE Power Usage **PLANET** Power LED . \wedge \bigcirc 3-pin Terminal Block • ۲ 0 0 0 DC Plug-in 10/100/1000BASE-T RJ45 Port

WGS-4215-8HP2S



3.1 DC Power Jack

The WGS-804HPT, WGS-4215-8P2S and WGS-4215-16P2S require **DC 48V~54V** power input, and the WGS-4215-8T and WGS-4215-8T/WGS-4215-8T2S require **DC 12~48V** power input. Should you have the issue of power connection, please contact your local sales representative.



DC receptacle is 2.1mm wide that conforms to the WGS-4215 series 2.1mm DC jack's central post. Do not install any improper power adaptor.



3.2 Terminal Block Connector Pinout

WGS-804HPT/WGS-4215-8T/WGS-4215-8P2S/WGS-4215-16P2S

To install the 3-pin Terminal Block Connector on the Wall-mount Managed Switch, simply follow the steps below:

Step 1: Insert positive DC power wire into **V+**, negative DC power wire into **V-**, and grounding wire into **Ground**.



Step 2: Tighten the wire-clamp screws for preventing the wires from loosening and plug into the Wall-mount Managed switch.



The wire gauge should be in the range from 12 to 24 AWG.
 The device must be grounded.

■ WGS-4215-8HP2S

The Front Panel of the **WGS-4215-8HP2S** consists of one spring terminal block connector with 3 contacts. Please follow the steps below to insert the power wire.



Insert positive/negative DC power wires into Contacts V+ and V- for powering the device.



PWR1 and PWR2 must provide **exactly the same DC voltage** for power load balance while operating with dual power input.

3.3 Wiring Completed in Three Steps (WGS-4215-8HP2S only)

- **Step 1:** Press the flat-blade screwdriver diagonally into the release hole.
- **Step 2:** Leave the flat-blade screwdriver pressed into the release hole and insert the wire into the terminal hole.

Insert the wire until the stripped portion is no longer visible to prevent shorting.

Step 3: Remove the flat-blade screwdriver from the release hole.

To test whether the wire is securely fastened to the terminal block, gently pull on the wire to ensure it does not come loose.





The wire gauge should be in the range from 12 to 16 AWG.

4. Hardware Installation

4.1 Wall-mount Installation

4.1.1 WGS-804HPT/WGS-4215-8T/WGS-4215-8T2S/WGS-4215-8P2S/WGS-4215-16P2S

To install the Wall-mount Managed Switch on the wall, simply follow the following steps:

- Step 1: Drive four 8mm diameter holes into the wall horizontally with the distance between the 2 holes being 133mm (WGS-804HPT/WGS-4215-8T), 163mm (WGS-4215-8T2S/WGS-4215-8P2S) and 230mm (WGS-4215-16P2S) shown in the table below.
- **Step 2:** Lightly hammer the wall anchors into the four holes.
- **Step 3:** Place the unit on the wall where there are four walls, and screw the bolts into the wall anchors to finish the installation.



Hole sizes for mounting					
Distance (mm)	8-port	8+2S	16+2S		
W	133	163	230		
D	118	118	124		

4.1.2 WGS-4215-8HP2S only

To install the Wall-mount Managed Switch on the wall, simply follow the following steps:

Step 1: Drill 4 holes with **8mm** diameter on the wall. The horizontal and vertical distances between the 2 holes are **230mm** and **124mm**, respectively.



Step 2: Hammer the four anchors into the four holes.



Step 3: Then the four given screws are screwed into the anchors to finish the wallmount installation, as shown below.



4.2 Wall Hanging Installation

4.2.1 WGS-4215-8HP2S only

To hang the Wall-mount Managed Switch on the wall, simply follow the following steps:

Step 1: Drill two holes, each with a diameter of 8mm, on opposite sides of the wall. The distance between the two holes should be 230mm, and the line connecting them must be horizontal.



Step 2: Hammer two anchors into the hole. Afterwards, screw in the two screws, leaving a space of 2mm between them as shown in the circled diagram below.



Step 3: The switch, shown in the picture below, can now be hung on the wall.





Make sure the equipment is securely wall-mounted as strong vibration could cause it to drop or break.

4.3 Magnet Installation

4.3.1 Magnet Installation of WGS-804HPT/WGS-4215-8T/WGS-4215-8P2S/WGS-4215-16P2S

To install the Wall-mount Managed Switch on a magnetic surface, simply follow the following diagrams:



4.3.2 Magnet Installation of WGS-4215-16P2S

There are six holes on the unit, using six round magnets to install. Please refer to the following.

Step 1: Turn the switch to the back and place the six round magnets through the holes.



Step 2: Turn the switch to the front and push the plastic bolts into the holes to secure the magnets.

Step 3: One last round magnet should be fixed in the middle of the switch.



Step 4: Now you can place the switch on to any magnetic surface.



Make sure magnetic mounting is securely fixed, so that the switch will not drop or break due to vibration.



Please use the screw from the magnet kit to avoid breaking the device.

4.4 DIN-rail Mounting



The DIN-rail kit is included in the package for wall mounting. Refer to the following figures to screw the DIN-rail on the Wall-mount Managed Switch. To hang up the Wall-mount Managed Switch, follow the steps below:

Step 1: Screw the DIN-rail on the Wall-mount Managed Switch.



Step 2: Lightly insert the DIN-rail into the track.



Step 3: Check whether the DIN-rail is tightly on the track.



5. Web Login

5.1 Starting Web Management

The following shows how to start up the **Web Management** of the Wall-mount Managed Switch. Note the Wall-mount Managed Switch is configured through an Ethernet connection. Please make sure the manager PC must be set to the same **IP subnet address**.

For example, the default IP address of the Wall-mount Managed Switch is **192.168.0.100**, then the manager PC should be set to **192.168.0.x** (where x is a number between 1 and 254, except 100) and the default subnet mask is 255.255.255.0.



Figure 5-1: IP Management Diagram

Logging in to the Wall-mount Managed Switch

 Use Google Chrome or above Web browser and enter IP address <u>https://192.168.0.100</u> to access the Web interface.



The following web screen is based on the firmware version before **February of 2024**.

2. When the following dialog box appears, please enter **"admin"** in both the default user name and password fields. The login screen in Figure 5-2 appears.

Default IP Address: **192.168.0.100** Default Username: **admin** Default Password: **admin**

PLANE	т		101010	
Networking & Commonics	like			
Username:				
Password:				
	1	LOGIN		
		Loging		

Figure 5-2: Web Login Screen

3. After entering the password, the main screen appears as Figure 5-7 shows.



The following web screen is based on the firmware version of **February** of **2024 or after**.

1. When the following dialog box appears, please enter the default user name "admin" and password. Refer to the following to determine your initial login password.

Default IP Address: **192.168.0.100** Default User Name: **admin** Default Password: **sw + the last 6 characters of the MAC ID in lowercase**

2. Find the MAC ID on your device label. The default password is "sw" or "mc" followed by the last six lowercase characters of the MAC ID.



MAC ID: A8F7E0XXXXXX Default Password: swxxxxxx ("x" means the last 6 digits of the MAC address. All characters should be in lowercase.)

Figure 5-3: Industrial Managed Switch MAC ID Label

PLANET Repetition & Communication	COTO TO
Username: Password:	
	LOGIN

Figure 5-4: Web Login Screen

3. After logging in, you will be prompted to change the initial password to a permanent one.

Password	
Password	
Retype Password	

Figure 5-5: Create a New Password

4. Enter the default username and password, then set a new password according to the rule-based prompt and confirm it. Upon success, press any key to return to the login prompt. Log in with "admin" and the "new password" to access the Web interface.



Figure 5-6: Web Login with New Password



The following web screen is based on the WGS-4215-8T2S. The display of the WGS-4215-8T2S is the same as those of the wall-mount Managed Switches.



Figure 5-7: Web Main Screen of Wall-mount Managed Switch

The Switch Menu on the top of the Web page lets you access all the commands and statistics the Industrial Managed Switch provides. The Switch Menu always contains one or more buttons, such as "System", "Switching", "QoS", "Security", "Ring" and "Maintenance".



Figure 5-8: Switch Menu

🔯 System	🗱 Switching	₹ Qos
 Management Time Settings Log Management SNMP Management RMON Remote Management 	 Port Management Link Aggregation VLAN Spanning Tree Multicast IGMP Snooping MLD Snooping LLDP MAC Address Table 	 General QoS Basic Mode Bandwidth Control Storm Control Voice VLAN

Figure 5-9: Switch Sub-menu

Security	🗘 Ring	🗲 Maintenance
 Access Security AAA 802.1X Port Security DHCP Snooping Dynamic ARP Inspection IP Source Guard DoS Access Control List 	 Ring Wizard ERPS 	 Swtich Maintenance Diagnostic

Figure 5-10: Switch Sub-menu

Now, you can use the Web management interface to continue the Switch management. Please refer to the user's manual for more.

5.2 Saving Configuration via the Web

In the Wall-mount Managed Switch, the running configuration file stores in the RAM. In the current version, the running configuration sequence of running-config can be saved from the RAM to FLASH by **"Save Configurations to FLASH"** function, so that the running configuration sequence becomes the startup configuration file, which is called configuration save.

To save all applied changes and set the current configuration as a startup configuration, the startup-configuration file will be loaded automatically across a system reboot.

1. Click **"Save > Save Configurations to FLASH"** to log in "Configuration Manager" Page.



2. Press the **"Apply"** button to save running configuration to start up configuration.

Configuration Manager					
Save Configuration					
Source File	 Running configuration Startup configuration Backup configuration 				
Destination File	 Startup configuration ○ Backup configuration 				
Apply					

6. SSH Login

The Wall-mount Managed Switch also supports SSHv2 for remote management. The switch asks for user name and password for remote login when using SSHv2 client software; please use the default username and password. Refer to **5.1 Starting Web Management** to determine your initial login password.



The following web screen is based on the firmware version before **February of 2024**.

Default IP Address: **192.168.0.100** Default Username: **admin** Default Password: **admin**

) TCP <u>/I</u> P	Hos <u>t</u> :	192.168.0.1	00	
	Service:	○ Te <u>I</u> net	TCP <u>p</u> or	rt#: 22
		● <u>SSH</u>	SSH <u>v</u> ersion:	SSH2
		O Other	Proto <u>c</u> ol:	
) S <u>e</u> rial	Po <u>r</u> t:	COM3: Intel	(R) Active Mana	gement Te 🔻

Username: adm	lin	
Password: ***	***	
WGS-4215-16P2	2S# _	





The following web screen is based on the firmware version of **February** of **2024 or after**.

Default IP Address: **192.168.0.100** Default Username: **admin** Default Password: **sw + the last 6 characters of the MAC ID in lowercase**

Find the MAC ID on your device label. The default password is "sw" followed by the last six lowercase characters of the MAC ID.



MAC ID: A8F7E0XXXXXX Default Password: swxxxxxx ("x" means the last 6 digits of the MAC address. All characters should be in lowercase.)

Figure 6-2: Managed Switch MAC ID Label

Enter the default username and password, then set a new password according to the rule-based prompt and confirm it. Upon success, press any key to return to the login prompt. Log in with "admin" and the "new password" to access the CLI.

(New)Password: Verify (New)Pa	******** ssword: *****
Success. Press any key j Usoppano: admi	to continue
Password: ****	***



The user can now enter commands to manage the Wall-mount Managed Switch. For a detailed description of the commands, please refer to the following chapters.



1. For security reason, please change and memorize the new password after this first setup.

2. Only accept command in lowercase letter under console interface.

6.1 Configuring IP Address

The Wall-mount Managed Switch is shipped with default IP address shown below:

IP Address: **192.168.0.100** Subnet Mask: **255.255.255.0**

To check the current IP address or modify a new IP address for the Switch, please use the procedure as follows:

Display of the Current IP Address

- 1. At the "#" prompt, enter "show ip".
- 2. The screen displays the current IP address shown in Figure 6-4.

Username: admin
Password: ****
WGS-4215-16P2S# show ip
IP Address: 192.168.0.100
Subnet Netmask: 255.255.255.0
Default Gateway: 192.168.0.254
WGS-4215-16P2S#

Figure 6-4: IP Information Screen

Configuration of the IP Address

3. At the "#" prompt, enter the following command and press **<Enter>** as shown in Figure 6-5.

WGS-4215-16P2S# configure WGS-4215-16P2S(config)# ip address 192.168.1.100 mask 255.255.255.0 WGS-4215-16P2S(config)# ip default gateway 192.168.1.254

The previous command would apply the following settings for the Wall-mount Managed Switch.

IP Address: **192.168.1.100** Subnet Mask: **255.255.255.0** Gateway: **192.168.1.254**

5.255.255.0

Figure 6-5: Configuring IP Address Screen

4. Repeat step 1 to check if the IP address has changed.

6.2 Storing the Current Switch Configuration

At the "#" prompt, enter the following command and press **<Enter>**.

copy running-config startup-config



Figure 6-6: Saving Current Configuration Command Screen

If the IP is successfully configured, the Wall-mount Managed Switch will apply the new IP address setting immediately. You can access the Web interface of the Wall-mount Managed Switch through the new IP address.



If you are not familiar with the Telnet command or the related parameter, enter "?" anytime in console to get the help description.

7. Recovering Back to Default Configuration

■ IP Address has been changed or admin password has been forgotten –

To reset the IP address to the default IP Address **"192.168.0.100"** and the user name password to factory default mode (default password is admin or sw + the last 6 characters of the MAC ID in lowercase), press the **reset button** on the front panel for about **5 seconds**. After the device is rebooted, you can log in the Web interface management within the same subnet of 192.168.0.xx.



Figure 7-1: WGS-804HPT/WGS-4215-8T Reset Button



Figure 7-2: WGS-4215-8T2S/WGS-4215-8P2S Reset Button



Figure 7-3: WGS-4215-8HP2S Reset Button



Figure 7-4: WGS-4215-16P2S Reset Button

8. Customer Support

Thank you for purchasing PLANET products. You can browse our online FAQ resource and User's Manual on PLANET Web site first to check if it could solve your issue. If you need more support information, please contact PLANET switch support team.

PLANET online FAQs: https://www.planet.com.tw/en/support/faq

Switch support team email address: support@planet.com.tw

WGS-804HPT/WGS-4215-8T/WGS-4215-8T2S/WGS-4215-8P2S/WGS-4215-8HP2S/ WGS-4215-16P2S User's Manual:

https://www.planet.com.tw/en/support/downloads?&method=keyword&keyword=WG S&view=3#list



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