# Industrial Rack-mount
# Managed Ethernet Switch

# IGS-R4215 Series

Quick Installation Guide

# Table of Contents

# 1. Package Contents

Thank you for purchasing **PLANET Industrial Managed Ethernet Switch, IGS-R4215 Rack-mount series.** The descriptions of these models are as follows:

| Model | Description |
|---|---|
| IGS-R4215-24T4X | Industrial L2/L4 24-Port 10/100/1000T + 4-Port 10G SFP+ Managed Ethernet Switch |
| IGS-R4215-24P4X | Industrial L2+ 24-Port 10/100/1000T 802.3at PoE + 4-Port 10G SFP+ Managed Ethernet Switch |

In this guide, the term "**Industrial Managed Switch**" refers specifically to the above models.

Open the box of the Industrial Managed Switch and carefully unpack it. The box should contain the following items for each model:

| Model<br>Item | IGS-R4215-24T4X | IGS-R4215-24P4X |
|---|---|---|
| Quick Installation Guide Sheet | ■ | ■ |
| Rack-mount Accessory Kit | ■ | ■ |
| AC Power Cord | ■ | - |
| RJ45 Dust Caps | 24 | 24 |
| SFP Dust Caps | 4 | 4 |

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

## 2. Requirements

● Workstations running Windows 10/11, MAC OS 10.15 or later, Linux, UNIX, or other platforms are compatible with TCP/IP protocols.

● Workstations are installed with Ethernet NIC (Network Interface Card)

● **Serial Port Connection** (Terminal)

&#10136; The above Workstations come with USB ports

&#10136; The above Workstations have been installed with **terminal emulator**, such as Tera Term or PuTTY.

&#10136; USB cable – one end is attached to the USB Type A/Type C port on the computer, while the other end is connected to the USB Type C console port of the Industrial Managed Switch.

● **Ethernet Port Connection**

&#10136; Network cables – Use standard network (UTP) cables with RJ45 connectors.

&#10136; The above Workstations are installed with Web browser.

| | |
|---|---|
| **Note** | It is recommended to use Google Chrome, Microsoft Edge or FireFox to access the Industrial Managed Switch. If the Web interface of the Industrial Managed Switch is not accessible, please turn off the anti-virus software or firewall and then try it again. |

# 3. Wiring the Power Inputs

The **Front Panel** of the IGS-R4215-24T4X consists one terminal block connector within 6 contacts for DC power source and one power inlet for AC power source as shown in **Figure 3-1**.
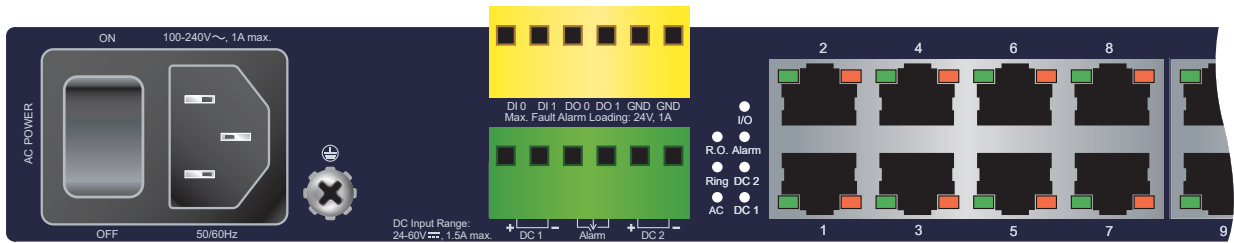
**Figure 3-1:** IGS-R4215-24T4X Power Input

The IGS-R4215-24P4X only has one terminal block connector within 6 contacts for DC power source as shown in Figure 3-2.
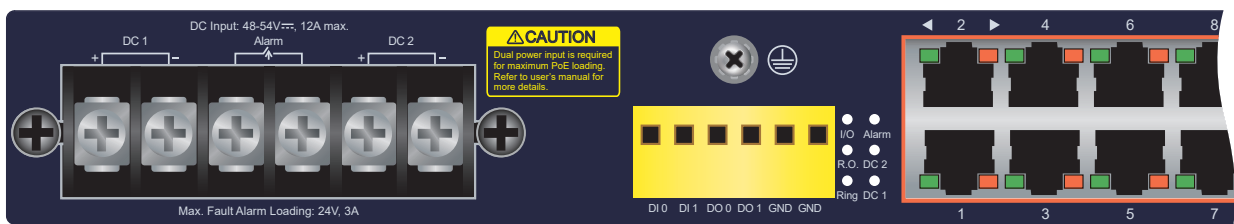
**Figure 3-2:** IGS-R4215-24P4X Inlet Power Input

The following table is the DC/AC power source specifications for each model.

| Power Source　　　　Model | IGS-R4215-24T4X | IGS-R4215-24P4X |
|---|---|---|
| DC Input | 24-60V, 1.5A Max. | 48-54V, 12A Max. |
| AC Input | 100-240V, 50/60Hz, 1A Max. | - |

## 3.1 Wiring DC Power Inputs

The 6-contact terminal block connector on the panel of Industrial Managed Switch is used for two DC redundant power inputs. Please follow the steps below to insert the power wires.

1. Insert positive and negative DC power wires into contacts 1 and 2 for DC power 1, or 5 and 6 for DC power 2.
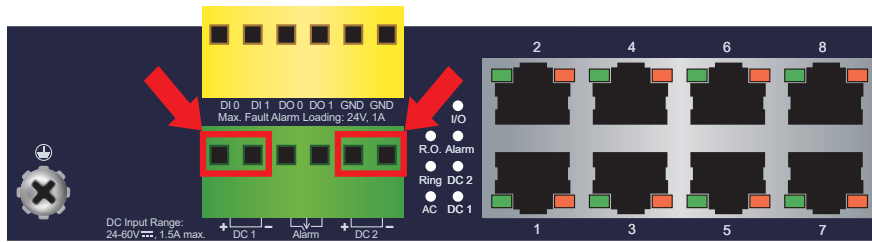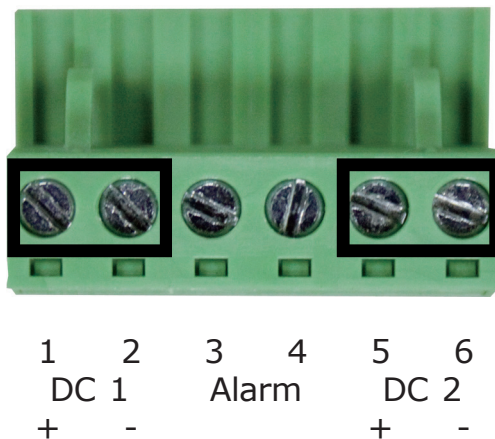


**Figure 3-3:** 6-contact Terminal Block Connector of IGS-R4215-24T4X
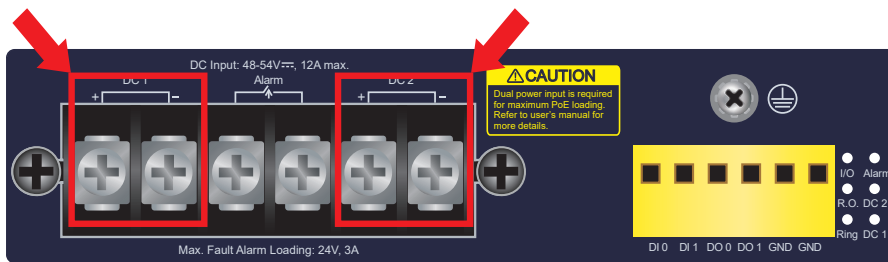


**Figure 3-4:** 6-contact Terminal Block Connector of IGS-R4215-24P4X

2. Tighten the wire-clamp screws to prevent the wires from loosening.



**Figure 3-5:** The screws of 6-contact Terminal Block Connector

| | 1. Based on the system's load difference, it is important to select a suitable gauge for the terminal block, which should be between **12** and **24 AWG**. |
|---|---|
| Note | 2. DC1 and DC2 must provide exactly the **same DC voltage** for power load balance while operating with dual power input. |

## 3.2 Grounding the Device

Users **MUST** complete grounding wiring with the device; otherwise, a sudden lightning could cause fatal damage to the device.
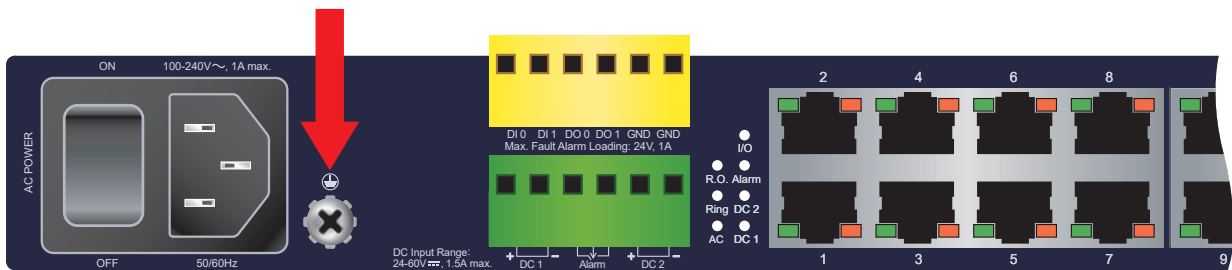


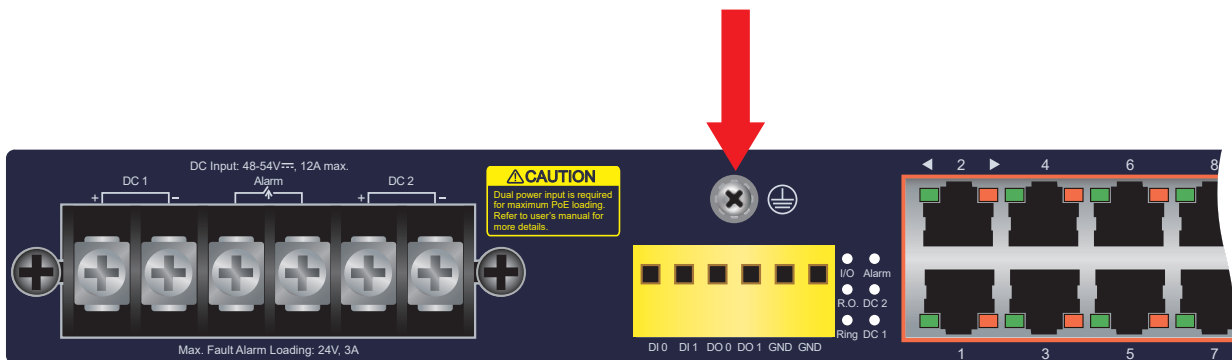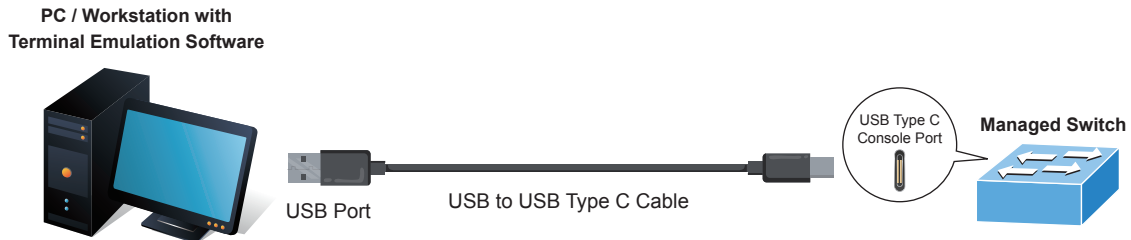**Figure 3-6:** IGS-R4215-24T4X Earth Grounding



**Figure 3-7:** IGS-R4215-24P4X Earth Grounding

# 4. Terminal Setup

To configure the system, connect one end of a USB data cable to a **USB Port** on a PC or notebook computer and the other end to the **USB Type-C console port** of the Industrial Managed Switch as shown in **Figure 4-1**.
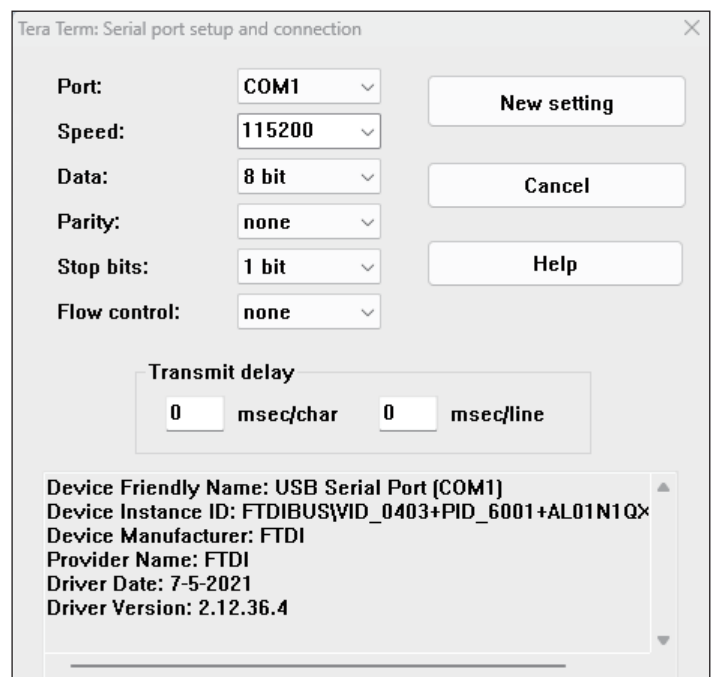
**Figure 4-1:** Industrial Managed Switch Console Connectivity

A terminal program is required to make the software connection to the Industrial Managed Switch. Tera Term program may be a good choice.

1. Run terminal program on the OS

2. When the following screen appears, make sure that the COM port should be configured as:

   ◆ Baud: 115200

   ◆ Data bits: 8

   ◆ Parity: None

   ◆ Stop bits: 1

   ◆ Flow control: None

**Figure 4-2:** COM Port Configuration

## 4.1 Logging on to the Console

Once the terminal has been connected to the device, power on the Industrial Managed Switch and the terminal will display **"running testing procedures"**.

| | |
|---|---|
| Note | 1. The following console screen is based on the IGS-R4215-24P4X. |
| | 2. The display of the IGS-R4215 series is the same as that of the IGS-R4215-24P4X. |

Then, the following message asks for the login user name and password. The factory default user name and password are shown as follows.

Username: **admin**
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.
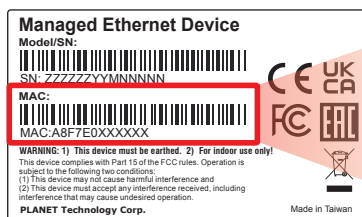


**Figure 4-3:** MAC ID Label

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 CLI.



**Figure 4-4:** Create a New Password and Login Again

You can now enter commands to manage the Switch. For a detailed description of the commands, please refer to the following chapters.

## 4.2 Configuring IP Address

The Industrial 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 Industrial Managed Switch, please use the procedures as follows:

### ■ Display of Current IP Address

**IGS-R4215-24T4X**

1.  At the **"IGS-R4215-24T4X#"** prompt, enter "**show ip**".

2.  The screen displays the current IP address, subnet mask and gateway as shown in **Figure 4-5**.

```
IGS-R4215-24T4X# show ip
IP Address: 192.168.0.100
Subnet Netmask: 255.255.255.0
Default Gateway: 192.168.0.254
IGS-R4215-24T4X# 
```

**Figure 4-5:** IP Information Screen – IGS-R4215-24T4X

## IGS-R4215-24P4X

1. At the **"IGS-R4215-24P4X#"** prompt, enter the following command and press **<Enter>**.

> IGS-R4215-24P4X# **show vlan interface**

2. The screen displays the current IP address, subnet mask and gateway as shown in **Figure 4-6**.

```
IGS-R4215-24P4X# show vlan interface
VLAN |    IP Address   |   Network Mask  |  DHCP  |   IPv6 Address/prefix              | AutoConf |  DHCPv6
-----+-----------------+-----------------+--------+-----------------------------------+----------+----------
   1|   192.168.0.100|   255.255.255.0| Disable|      fe80::aaf7:e0ff:feaa:1234/64|    Enable|  Disable
IGS-R4215-24P4X# █
```

**Figure 4-6:** IP Information Screen – IGS-R4215-24P4X

■ **Configuration of the IP address**

## IGS-R4215-24T4X

1. At the **"IGS-R4215-24T4X#"** prompt, enter "**configure**".

2. At **"IGS-R4215-24T4X(config)#"** prompt, enter the following command and press **<Enter>** as shown in **Figure 4-7**.

> IGS-R4215-24P4X(config)# **ip address 192.168.1.100 mask 255.255.255.0**
> IGS-R4215-24P4X(config)# **ip default-gateway 192.168.1.254**

The previous command would apply the following settings for the Industrial Managed Switch.

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

```
IGS-R4215-24T4X#
IGS-R4215-24T4X# configure
IGS-R4215-24T4X(config)# ip address 192.168.1.100 mask 255.255.255.0
IGS-R4215-24T4X(config)# ip default-gateway 192.168.1.254
IGS-R4215-24T4X(config)#
IGS-R4215-24T4X(config)# exit
IGS-R4215-24T4X#
```

**Figure 4-7:** Configuring IP Address Screen – IGS-R4215-24T4X

3. Repeat the previous steps to check if the IP address has changed.

## IGS-R4215-24P4X

1. At the **"IGS-R4215-24P4X#"** prompt, enter **"configure"**.

2. At the **"IGS-R4215-24P4X(config)#"** prompt, enter the following command and press **<Enter>** as shown in **Figure 4-8**.

> IGS-R4215-24P4X(config)# **interface VLAN 1**
> IGS-R4215-24P4X(config-if-vlan)# **ip address 192.168.1.100 mask 255.255.255.0**

The previous command would apply the following settings for the Industrial Managed Switch.

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

```
IGS-R4215-24P4X# configure
IGS-R4215-24P4X(config)# interface VLAN 1
IGS-R4215-24P4X(config-if-vlan)# ip address 192.168.1.100 mask 255.255.255.0
IGS-R4215-24P4X(config-if-vlan)# exit
IGS-R4215-24P4X(config)# exit
IGS-R4215-24P4X#
```

**Figure 4-8:** Configuring IP Address Screen – IGS-R4215-24P4X

3. Repeat the previous steps to check if the IP address has changed.

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

## 4.3 Saving the Configuration

At the **"#"** prompt, enter **"copy running-config startup-config"** as shown in **Figure 4-9**.

```
IGS-R4215-24P4X# copy running-config startup-config
Success
IGS-R4215-24P4X#
```

**Figure 4-9:** Saving Current Configuration Command Screen

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

# 5. Starting Web Management

The following shows how to start up the **Web Management** of the Industrial Managed Switch. Note the Industrial Managed Switch is configured through an Ethernet connection. Please make sure the manager PC must be set to the same **IP subnet address** as shown in **Figure 5-1**.

For example, the default IP address of the Industrial 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*.
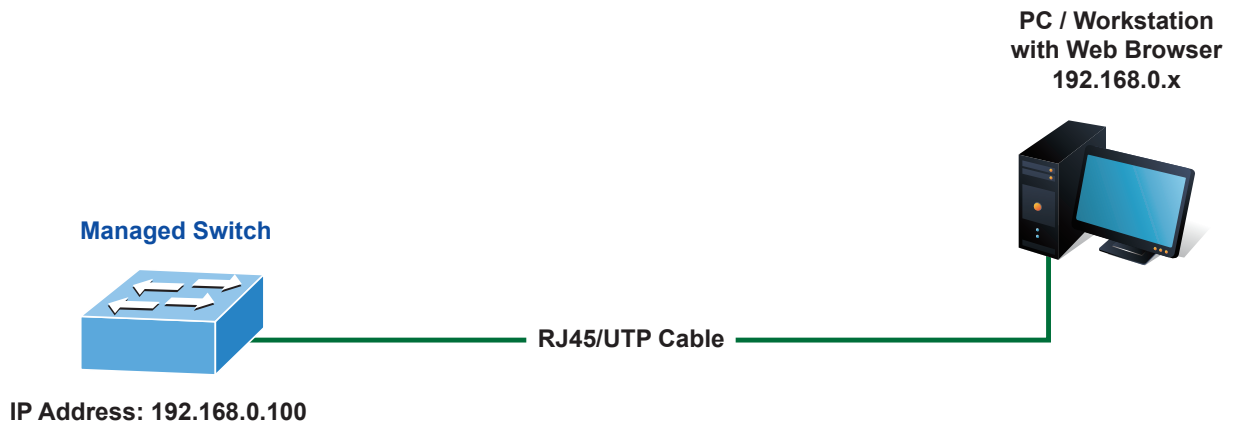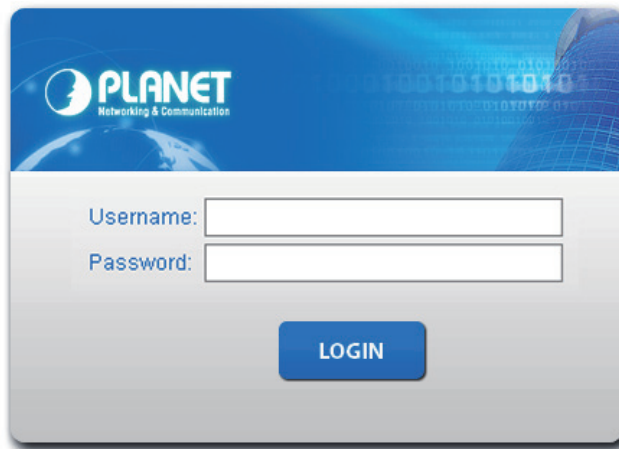


**Figure 5-1:** IP Management Diagram
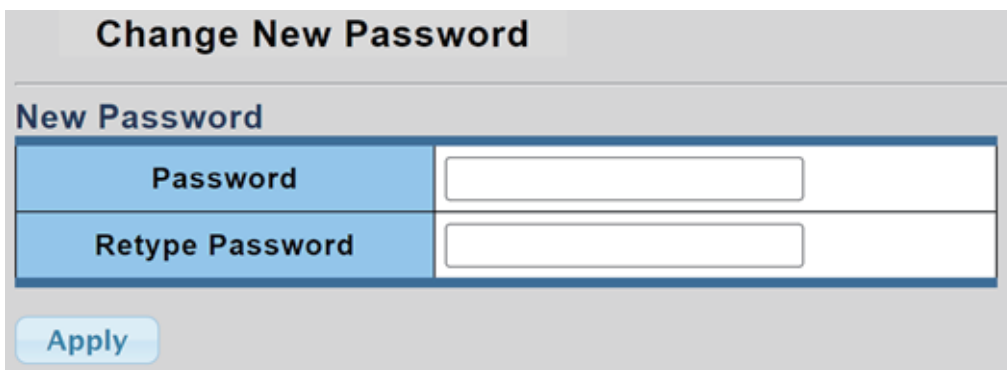
## 5.1 Logging in to the Industrial Managed Switch

1. Use Google Chrome or above Web browser and enter IP address **_https://192.168.0.100_** to access the Web interface.

2. When the following dialog box in **Figure 5-2** appears, please enter the default user name and password. Refer to **Section 4.1** to determine your initial login password.

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



**Figure 5-2:** Web Login Screen

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



**Figure 5-3:** Create a New Password

4. Once the password change is complete, re-enter the web interface using your new password and the main screen appears as **Figure 5-4** shows.
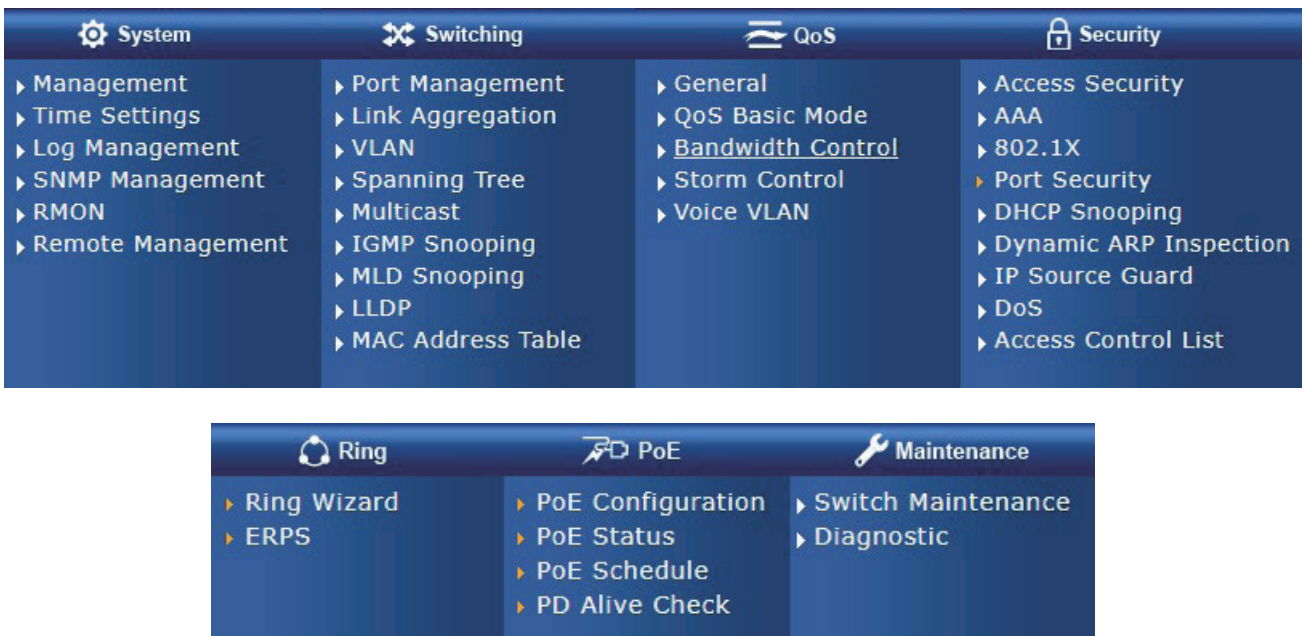


**Figure 5-4:** Web Main Screen of Industrial Managed Switch

The Switch Menu on the left of the Web page lets you access all the commands and statistics the Industrial Managed Switch provides.



**Figure 5-5:** Switch Menu





**Figure 5-6:** 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

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 icon> Save Configurations"** to log in to the **"Configuration Manager"** page.
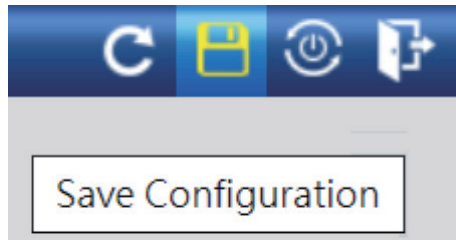


**Figure 5-7:** Save Icon

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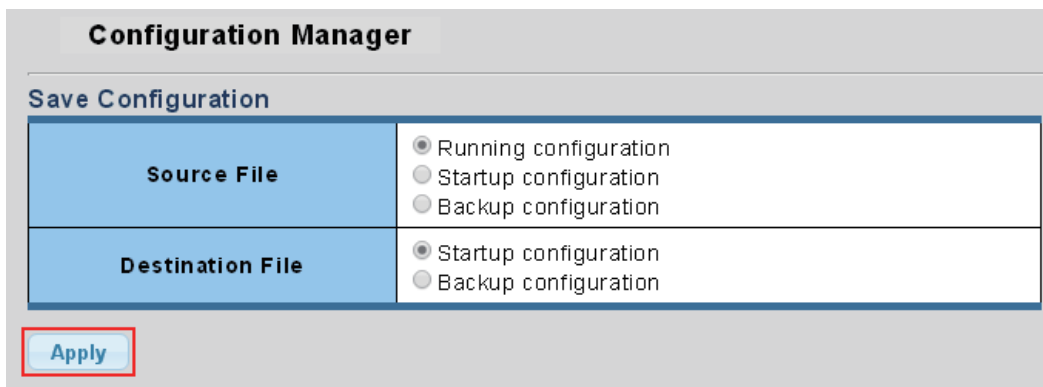


**Figure 5-8:** Save Configuration

# 6. 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"* or reset the login password to default value, press the hardware reset button on the front panel for about **10 seconds**.

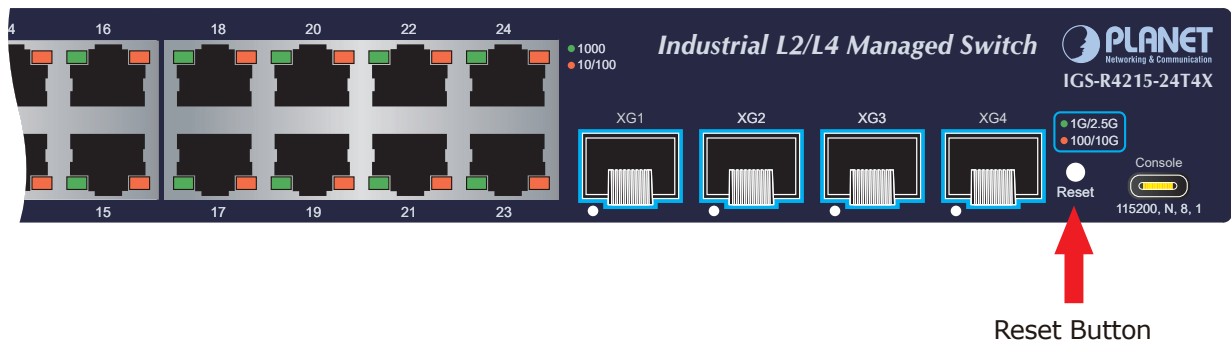After the device is rebooted, you can log in the management Web interface within the same subnet of *"192.168.0.xx"*.



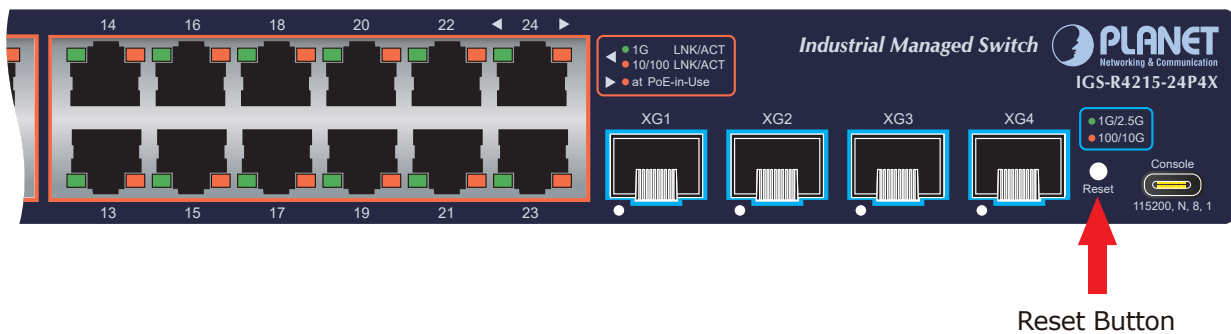**Figure 6-1:** IGS-R4215-24T4X Reset Button



**Figure 6-2:** IGS-R4215-24P4X Reset Button

## 7. *Customer Support*

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

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

Support team mail address:
support@planet.com.tw

IGS-R4215 Rack-mount Series User's Manual
https://www.planet.com.tw/en/support/downloads?&method=keyword&keyword=IGS-R4215&view=3#list



(Please select your switch model name from the drop-down menu of Product Model.)