Managed Metro Ethernet Switch

MGSW-24160F

Quick Installation Guide

Table of Contents

1. Package Contents

Thank you for purchasing **PLANET L2+ Managed Metro Ethernet Switch**. The description of this model is as follows:

Model	Description
MGSW-24160F	L2+ 8-Port 10/100/1000T + 12-Port 100/1000X SFP + 4-Port 10G SFP+ Managed Metro Ethernet Switch

In this guide, the term **"Managed Metro Switch"** refers specifically to the MGSW-24160F.

Open the box of the Managed Metro Switch and carefully unpack it.

The box should contain the following items:

- The Managed Metro Switch x 1
- QR Code Sheet x 1
- RJ45 to RS232 Console Cable x 1
- Rack-mount Accessory Kit x 1
- AC Power Cord x 1
- Dust Cap

Model	RJ45 Dust Caps	SFP Dust Caps
MGSW-24160F	9	16

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)

  ➢ The above Workstations come with COM Port (DB9) or USB-to-RS232 converter.

  ➢ The above Workstations have been installed with **terminal emulator**, such as Tera Term or PuTTY.

  ➢ Serial cable – one end is attached to the RS232 serial port, while the other end to the console port of the Managed Metro Switch.

- **Ethernet Port Connection**

  ➢ Network cables – Use standard network (UTP) cables with RJ45 connectors.

  ➢ The above Workstations are installed with Web browser.

Note	It is recommended to use Google Chrome, Microsoft Edge or FireFox to access the Managed Metro Switch. If the Web interface of the Managed Metro 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 Managed Metro Switch 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**.
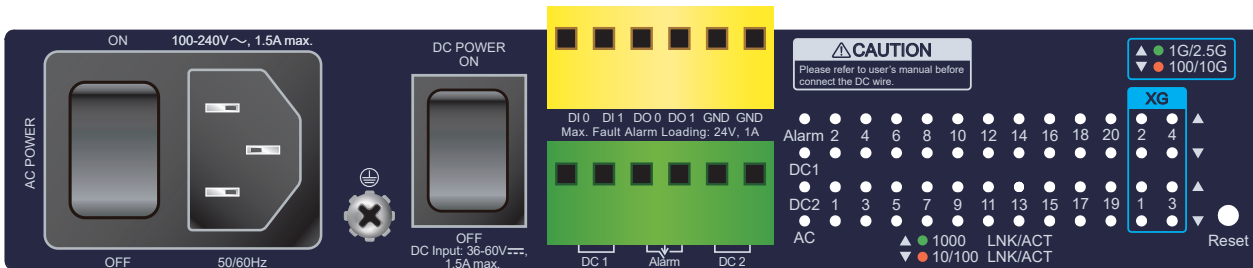

Figure 3-1: MGSW-24160F Inlet Power Socket

Users can plug the Managed Metro Switch into either AC or DC power source for the connectivity. The specifications of the DC/AC power source are as follows.

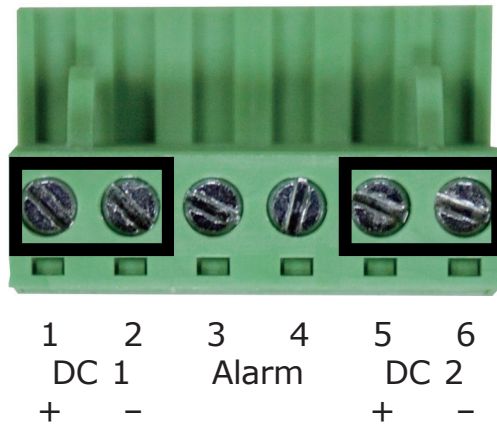| Power source |
| --- |
| DC: 36-60V, 1.5A Max. |
| AC: 100-240V, 50/60Hz, 1.5A Max. |

For wiring DC 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.
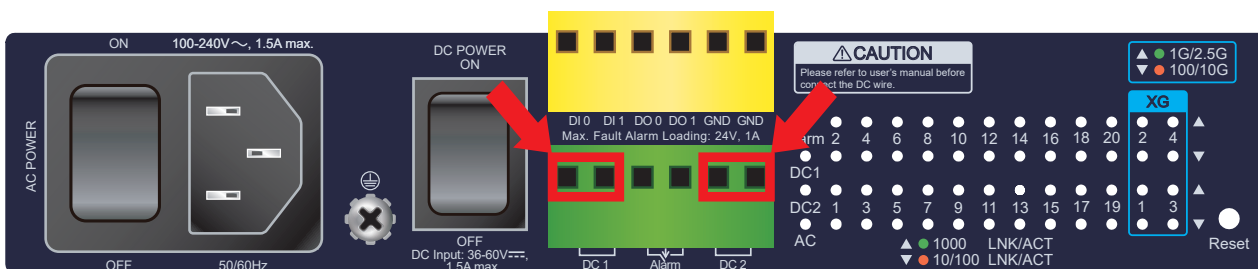
Figure 3-2: 6-contact Terminal Block Connector

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

**Figure 3-3:** Screws of 6-contact Terminal Block Connector

| Note	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. 2. DC1 and DC2 must provide exactly the same DC voltage for power load balance while operating with dual power input.

3.1 Grounding the Device

Users MUST complete grounding wiring with the device; otherwise, a sudden lightning could cause fatal damage to the device.
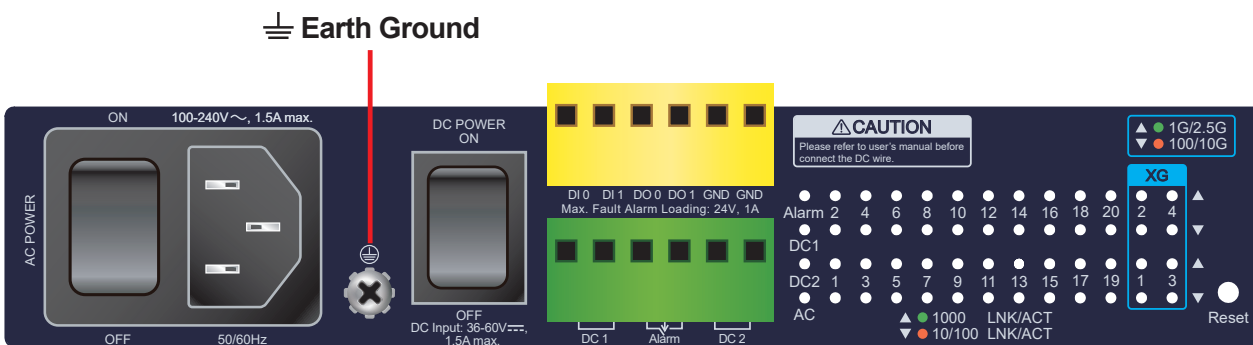
Figure 3-4: MGSW-24160F Earth Grounding

4. Terminal Setup

To configure the system, connect a serial cable to a **COM port** on a PC or notebook computer and the RJ45 cable to **RJ45 console port** of the Managed Metro Switch as shown in **Figure 4-1**.
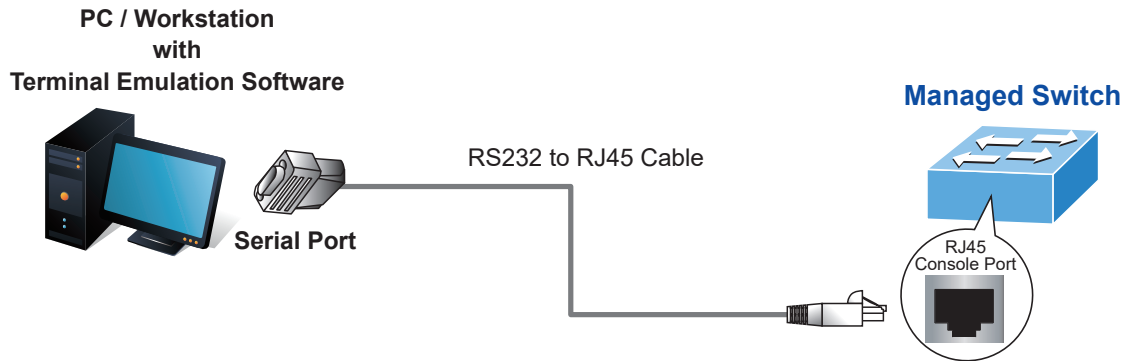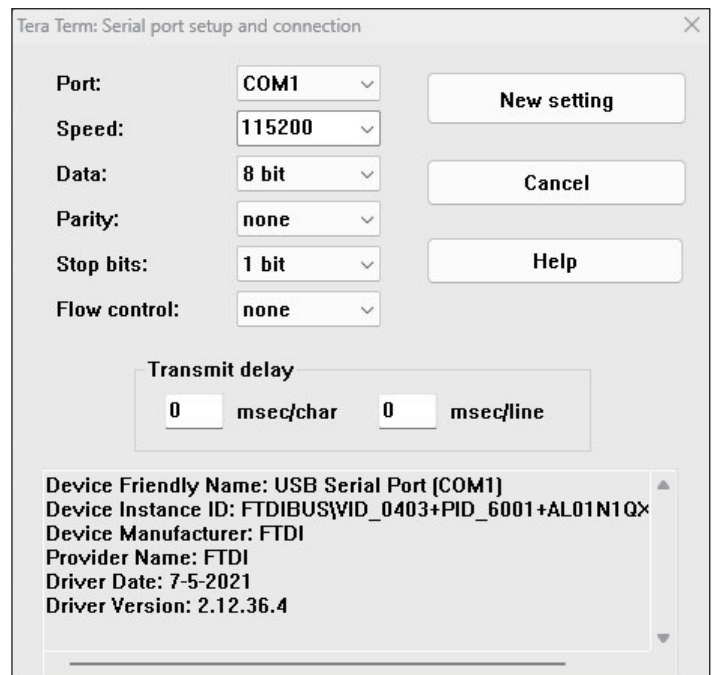

Figure 4-1: Managed Metro Switch Console Connectivity

A terminal program is required to make the software connection to the Managed Metro 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 Managed Metro Switch and the terminal will display **"running testing procedures"**. 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.
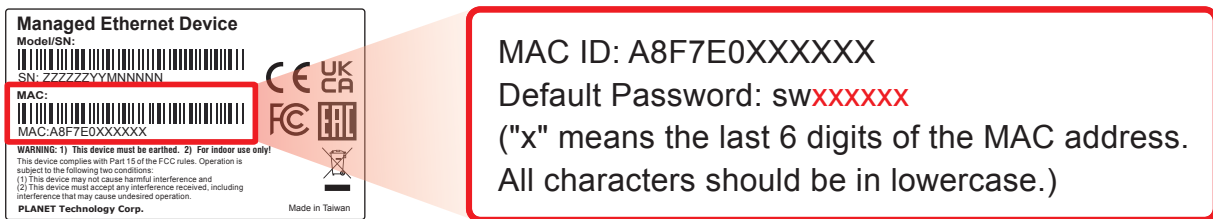

Figure 4-3: MAC ID Label

Enter the default username and password, and 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

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

> **Note**
>
> 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.

4.2 Configuring IP Address

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

Note	The following console screen is based on the firmware version of **August 2024 or later**.

■ Display of Current IP Address

1. At the **"MGSW-24160F#"** prompt, enter the following command and press **<Enter>.**

> MGSW-24160F# **show vlan interface**

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

```
MGSW-24160F#
MGSW-24160F# 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:fe93:21a1/64|    Enable|   Disable
MGSW-24160F#
```

Figure 4-5: IP Information Screen

■ Configuration of the IP address

1. At the **"MGSW-24160F#"** prompt, enter **"configure"**.

2. At the **"MGSW-24160F(config)#"** prompt, enter the following command and press **<Enter>** as shown in **Figure 4-6**.

> MGSW-24160F(config)# **interface VLAN 1**
> MGSW-24160F(config-if-vlan)# **ip address 192.168.1.100 mask 255.255.255.0**

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

IP Address: 192.168.1.100
Subnet Mask: 255.255.255.0

Figure 4-6: Configuring IP Address Screen

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

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

4.3 Saving the Configuration

At the **"MGSW-24160F#"** prompt, enter **"copy running-config startup-config"** as shown in **Figure 4-7**.

Figure 4-7: 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 Managed Metro Switch. Note the Industrial Metro 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 Managed Metro 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*.
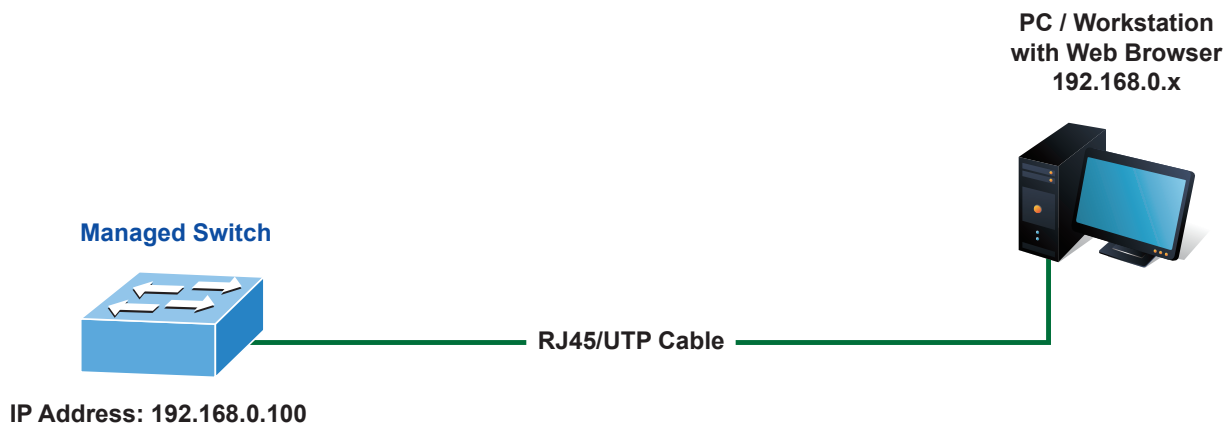
PC / Workstation with Web Browser 192.168.0.x

Managed Switch

RJ45/UTP Cable

IP Address: 192.168.0.100

Figure 5-1: IP Management Diagram

5.1 Logging in to the Managed Metro 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**
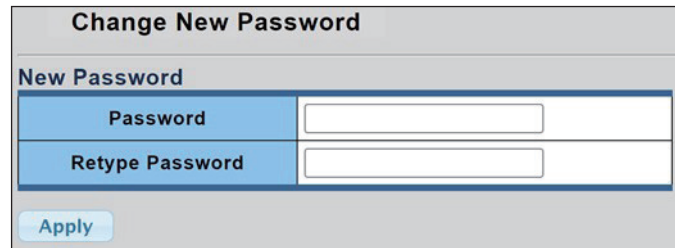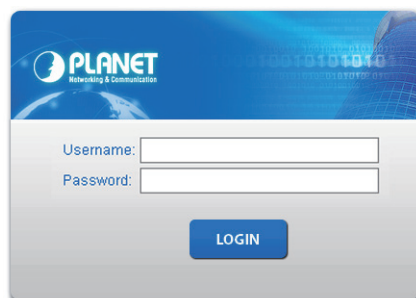Default Password: **sw + the last 6 characters of the MAC ID in lowercase**

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 Managed Metro Switch

The Switch Menu on the left of the Web page lets you access all the commands and statistics the Managed Metro 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.
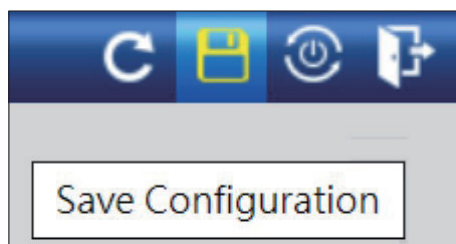
Figure 5-7: Save Icon

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"**.
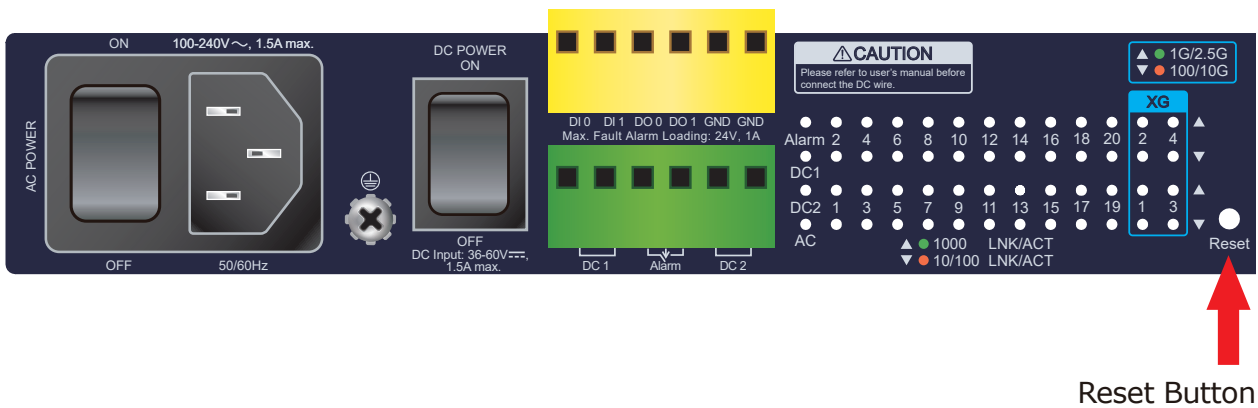

Reset Button

Figure 6-1: MGSW-24160F 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

MGSW-24160F User's Manual
https://www.planet.com.tw/en/support/downloads?&method=keyword&keyword=MGSW&view=3#list

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