# Industrial L2+ Multi-Port Full Gigabit Managed Ethernet Switches

# IGS-10020MT/IGS-10080MFT IGS-12040MT/IGS-20040MT

**Quick Installation Guide** 

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## 1. Package Contents

Thank you for purchasing PLANET Industrial L2+ Multi-Port Gigabit Managed Ethernet Switches, such as IGS-10020MT, IGS-10080MFT, IGS-12040MT and IGS-20040MT. The descriptions of these models are as follows:

IGS-10020MT	Industrial 8-Port 10/100/1000T + 2-Port 1G/2.5G SFP Managed Switch
IGS-10080MFT	Industrial 6-Port 100/1000X SFP + 2-Port 1G/2.5G SFP + 2-Port 10/100/1000T Managed Switch
IGS-12040MT	Industrial 8-Port 10/100/1000T + 2-Port 100/1G SFP + 2-Port 1G/2.5G SFP Managed Switch
IGS-20040MT	Industrial 16-Port 10/100/1000T + 4-Port 100/1000X SFP Managed Switch

**"Industrial L2+ Managed Switch"** mentioned in this Quick Installation Guide refers to the above four models.

Open the box of the **Industrial L2+ Managed Switch** and carefully unpack it. The box should contain the following items:

- The Industrial L2+ Managed Switch x 1
- QR Code Sheet x 1
- DIN-rail Kit x 1
- Wall Mounting Kit x 1
- DB9 to RJ45 Interface RS232 Console Cable x 1

(Only IGS-10020MT doesn't have console interface.)

• Dust Cap (Please refer to the table below.)

Item	RJ45 Dust Cap	SFP Dust Cap		
IGS-10020MT	8	2		
IGS-10080MFT	3	8		
IGS-12040MT	9	4		
IGS-20040MT	17	4		

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.

#### 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 Hyper Terminal included in Windows XP/2003, putty or tera term.
- Serial cable -- one end is attached to the RS232 serial port, while the other end to the RJ45 console port of the Industrial L2+ Managed Switch.

#### Ethernet Port Connection

- > Workstations are installed with Ethernet NIC (Network Interface Card)
- > 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 Industrial L2+ Managed Switch. If the Web interface of the Industrial L2+ Managed Switch is not accessible, please turn off the antivirus software or firewall and then try it again.

## 3. Wiring the Power Inputs

The Upper Panel of the Industrial L2+ Managed Switch indicates a DC inlet power socket and consists of one terminal block connector within 6 contacts. Please follow the steps below to insert the power wire.

- 1. Insert positive/negative DC power wires into Contacts 1 and 2 for Power 1, or Contacts 5 and 6 for Power 2.
  - IGS-10020MT: 12-48V DC, 24V AC

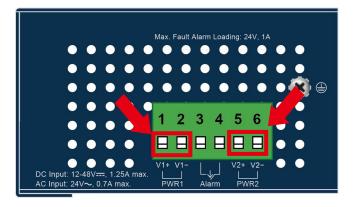


Figure 3-1: IGS-10020MT Upper Panel

■ IGS-10080MFT: 12-48V DC, 24V AC

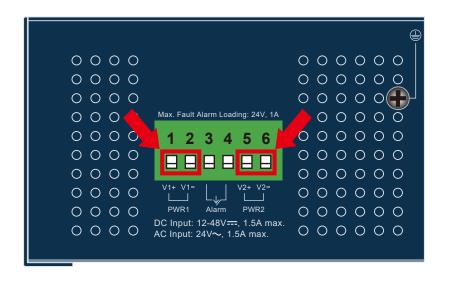
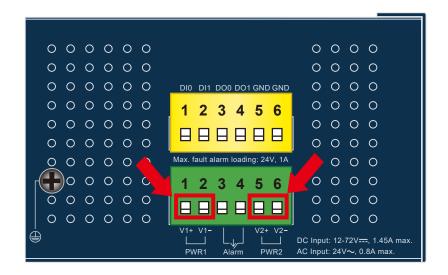


Figure 3-2: IGS-10080MFT Upper Panel

#### ■ IGS-12040MT: 12~72V DC, 24V AC





#### ■ IGS-20040MT: 9~48V DC, 24V AC

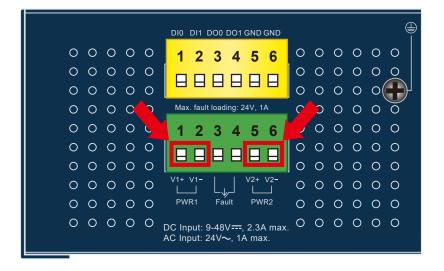
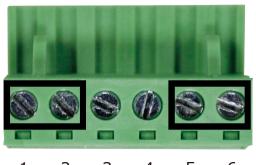


Figure 3-4: IGS-20040MT Upper Panel

2. Tighten the wire-clamp screws for preventing the wires from loosening.



 1
 2
 3
 4
 5
 6

 V1+
 V1 V2+
 V2 

 Power 1
 Power 2

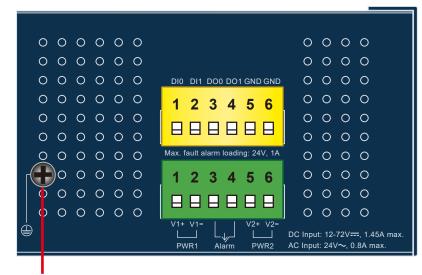
Item	Positive (+) Pin	Negative (-) Pin		
IGS-10020MT	Pin 1 / 5			
IGS-10080MFT		Pin 2 / 6		
IGS-12040MT				
IGS-20040MT				



The wire gauge for the terminal block should be in the range from **12** to **24** AWG.

## 3.1 Grounding the Device

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



**≟** Earth Ground

## 4. Terminal Setup

To configure the system, connect a serial cable to a **COM port** on a PC or notebook computer and to RJ45 type serial (console) port of the Industrial L2+ Managed Switch. The console port of the Industrial L2+ Managed Switch is DCE already, so that you can connect the console port directly through PC without the need of null modem.



Figure 4-1: Industrial L2+ Managed Switch Console Connectivity

A terminal program is required to make the software connected to the Industrial L2+ Managed Switch. Putty or Tera Term 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
  - ◆ Parity: None
  - Data Bits: 8
  - Stop Bits: 1
  - ◆ Flow Control: None

COM1 Properties 🔹 🕐 🔀
Port Settings
Bits per second: 115200
Data bits: 8
Parity: None
Stop bits: 1
Elow control: None
<u>R</u> estore Defaults
OK Cancel Apply

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 L2+ Managed Switch and the terminal will display "running testing procedures".

	1. There are three switches (IGS-12040MT, IGS-10080MFT and IGS-20040MT) that come with the RJ45 type console interface.
Note	2. The following console screen is based on the IGS-12040MT; the display of the IGS-12040MT is the same as that of the IGS-10080MFT and IGS-20040MT.
	3. The following console screen is based on the firmware version before <b>February of 2024</b> .

Then, the following message asks to log in user name and password as shown in Figure 4-3. Please enter the factory default user name **"admin"** and password **"admin"**.

User name: **admin** Password: **admin** 



Figure 4-3: Console Login Screen



- 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.



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

User name: **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" 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 4-4: 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.

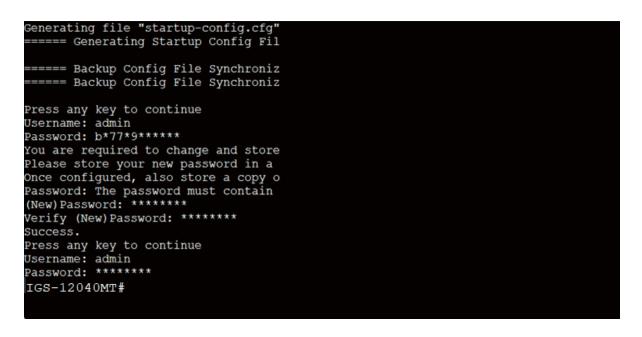


Figure 4-5: Create a New Password and Login Again

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

#### 4.2 Configuring IP Address

The Industrial L2+ 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 L2+ Managed Switch, please use the procedure as follows:

#### Display of the current IP Address

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

Press ENTER to get started		
Username: admin		
Password:		
IGS-12040MT# show ip interfa	ce briet	
Interface Address	Method	Status
VLAN 1 192.168.0.100/24	Manual	UP
IGS-12040MT#		

Figure 4-6: IP Information Screen

#### Configuration of the IP Address

3. At the "#" prompt, enter the following command and press **<Enter>** as shown in Figure 4-7.

```
IGS-12040MT# configure terminal
IGS-12040MT(config)# interface vlan 1
IGS-12040MT(config-if-vlan)# ip address 192.168.1.100 255.255.255.0
IGS-12040MT(config-if-vlan)#
```

The previous command would apply the following settings for the Industrial L2+ Managed Switch.

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

Press ENTE	R to get started		
Username:	admin		
Password: TGS-12040M	IT# show ip interface	brief	
	Address		Status
VLAN 1	192.168.0.100/24	Manual	UP
IGS-12040M	T# configure termina	1	
IGS-12040M	T(config)# interface	vlan 1	
IGS-12040M	T(config-if-vlan)# i	p address	192.168.1.100 255.255.255.0
IGS-12040M	T(config-if-vlan)#		

Figure 4-7: Configuring IP Address Screen

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

■ Storing the current switch configuration

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

# copy running-config startup-config

```
IGS-12040MT(config)# exit
IGS-12040MT# copy running-config startup-config
Building configuration...
do not reset or power off the device!
% Saving 3916 bytes to flash:startup-config
IGS-12040MT#
```



If the IP is successfully configured, the Industrial L2+ Managed Switch will apply the new IP address setting immediately. You can access the Web interface of the Industrial L2+ Managed Switch through the new IP address.



If you are not familiar with the console command or the related parameter, enter "**help**" 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 L2+ Managed Switch. Note the Industrial L2+ 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 Industrial L2+ 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.

**IGS Industrial Managed Switch** 



IP Address: 192.168.0.x

IP Address: 192.168.0.100



#### 5.1 Logging in to the Industrial L2+ Managed Switch

 Use Chrome 98.0.xxx or above for Web browser and enter IP address <u>https://192.168.0.100</u> (the factory-default IP address) to access the Web interface.



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

 When the following dialog box appears, please enter the default user name "admin" and password "admin" (or the password you have changed before) as shown in Figure 5-2.

Default IP Address: **192.168.0.100** Default User Name: **admin** Default Password: **admin** 

Authentication required					
http://192.168.0.100 Your connection to this site is not private					
Username					
Password					
	Log in Cancel				

Figure 5-2: Web Login Screen



The following web screen is based on the IGS-10020MT; the display of the IGS-10020MT is the same as those of the IGS-12040MT, IGS-10080MFT and IGS-20040MT.

3. After entering the password, the main screen appears as shown in Figure 5-6.

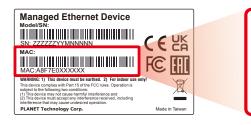


The following web screen is based on the firmware version of **February** of **2024 or after**.

4. When the following dialog box appears, please enter the default user name "admin" and and password. Refer to Section 4.1 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** 

5. 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: A8F7E0XXXXX Default Password: swxxxxx ("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

Authentication rec	quired	
http://192.168.0.100 Your connection to this	s site is not private	
Username		
Password		
	Log in	Cancel

Figure 5-4: Login Screen

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

	Change Password				
	New Password				
Password	□ show password				
Retype Password					
Apply Reset					
The password must contain 8-31 characters, including upper case, lower case, numerals and other symbols. Please note, spaces (blanks) are not accepted.					

Figure 5-5: Create a New Password

7. 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 Main Screen of Industrial L2+ Managed Switch

The Switch Menu on the top of the Web page lets you access all the commands and statistics the Industrial L2+ Managed Switch provides. The Switch Menu always contains one or more buttons, such as **"System"**, **"Switching"**, **"QoS"**, **"Security"**, **"Ring"**, **"ONVIF"** and **"Maintenance"**.

🔯 System	💸 Switching	<b>≥</b> Q₀S	Security	🗘 Ring	M ONVIF	🗲 Maintenance
		Figur	e 5-7: Switcl	n Menu		
		IGS-	10020MT			
		► SNM ► RMO ► DHC		ı		

Figure 5-8: Switch Menu -- System

IGS-10020MT
Port Management
Link Aggregation
▶ VLANs
VLAN Translation
Spanning Tree
▶ IGMP Snooping
MLD Snooping
▶ MVR
▶ LLDP
MAC Address Table
Loop Protection
▶ UDLD
▶ GVRP
▶ PTP
Link OAM

Figure 5-9: Switch Menu – Switching

IGS-10020MT	
▶ General	
Bandwidth Contro	l
Storm Control	
Differentiated Ser	vices
▶ QCL	

Figure 5-10: Switch Menu -- QoS



Figure 5-11: Switch Menu -- Maintenance

IGS-10	D20MT	
Access	Security	
► AAA		
Port Aut	thentication	
▶ Port Sec	curity	
Access	Control List	
DHCP S	nooping	
IP Sour	ce Guard	
ARP Ins	pection	

Figure 5-12: Switch Menu -- Security

IGS-10020MT	
- Ring	
• MEP	
ERPS	
Ring Wizard	

Figure 5-13: Switch Menu - Ring



If you are not familiar with Switch functions or the related parameter, press **"Help icon"** anytime on the Web page to get the help description.

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

#### 5.2 Saving Configuration

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

1. Click the **Save** icon on the top Switch Menu bar.



Figure 5-14: Save Config -- Hot Key

2. Press the **"Save Configuration"** button.



3. Or the other way to save the setting is to Click **Maintenance, Save Startup Config**.

IGS-10020MT
- Switch Maintenance
Web Firmware Upgrade
Save Startup Config
<ul> <li>Configuration Download</li> </ul>
Configuration Upload
Configuration Activate
Configuration Delete
Image Select
Factory Default
System Reboot
Diagnostics

Figure 5-15: Save Config -- Maintenance

## 6. Recovering Back to Default Configuration

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 hardware-based 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 and default password. Be noted that all the previous setups will be disappeared after the factory default reset is made.

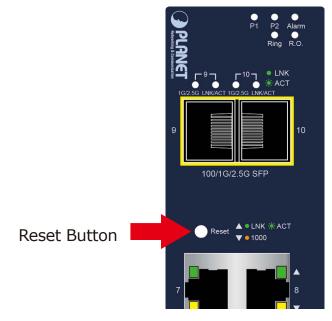


Figure 6-1: IGS-10020MT Reset Button

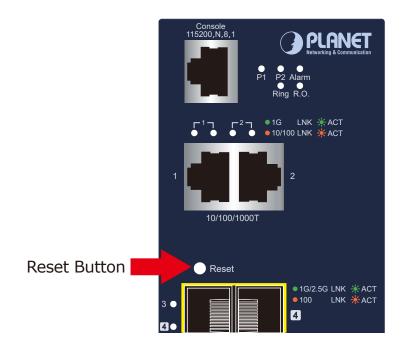


Figure 6-2: IGS-10080MFT Reset Button

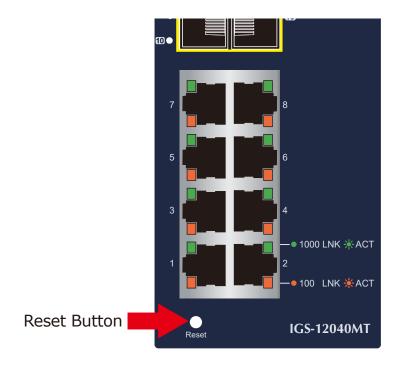


Figure 6-3: IGS-12040MT Reset Button

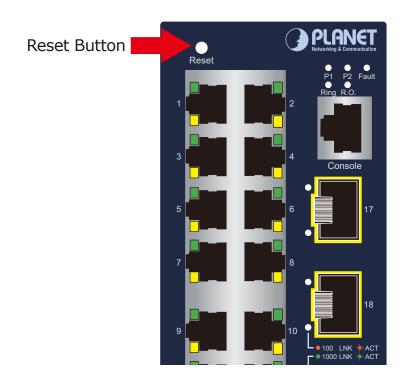


Figure 6-4: IGS-20040MT Reset Button

# 7. Product Note

### ■ IGS-10080MFT

The Port 3 and port 4 of IGS-10080MFT supports operating speeds of 100M, 1Gbps and **2.5Gbps**. The table below shows physical port mapping to command line interface:

Port	CLI Interface
Port-1	GigabitEthernet 1/1
Port-2	GigabitEthernet 1/2
Port-3	2.5GigabitEthernet 1/1
Port-4	2.5GigabitEthernet 1/2
Port-5	GigabitEthernet 1/3
Port-6	GigabitEthernet 1/4
Port-7	GigabitEthernet 1/5
Port-8	GigabitEthernet 1/6
Port-9	GigabitEthernet 1/7
Port-10	GigabitEthernet 1/8

# 8. 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 switch support team.

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

Switch support team mail address: <a href="mailto:support@planet.com.tw">support@planet.com.tw</a>

IGS-10020MT/IGS-10080MFT/IGS-12040MT/IGS-20040MT User's Manual: https://www.planet.com.tw/en/support/downloads?&method=keyword&keyword=IGS &view=3#list



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

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