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 100/1000X SFP Managed Switch
IGS-10080MFT	Industrial 8-Port 100/1000X SFP + 2-Port 10/100/1000T Managed Switch
IGS-12040MT	Industrial 8-Port 10/100/1000T + 4-Port 100/1000X 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
- Quick Installation Guide 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.)

	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 XP/2003/Vista/7/8/10/2008, MAC OS X or later, Linux, UNIX, or other platforms 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 and JAVA runtime environment plug-in.

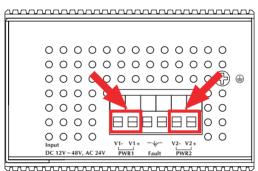


It is recommended to use Internet Explorer 8.0 or above to access the Industrial L2+ Managed Switch. If the Web interface of the Industrial L2+ Managed Switch is not accessible, please turn off the anti-virus software or firewall and then try it again.

3. Wiring the Power Inputs

The 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

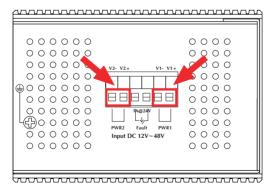


Figure 3-2: IGS-10080MFT Upper Panel

■ IGS-12040MT: 12~72V DC, 24V AC

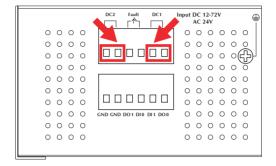


Figure 3-3: IGS-12040MT Upper Panel

■ IGS-20040MT: 9~48V DC, 24V AC

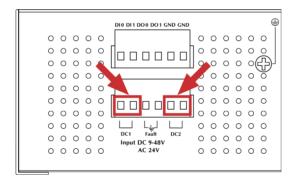
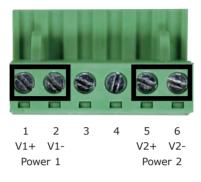


Figure 3-4: IGS-20040MT Upper Panel

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



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



The wire gauge for the terminal block should be in the range from ${\bf 12}$ to ${\bf 24}$ AWG.

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.

IGS Industrial Managed Switch

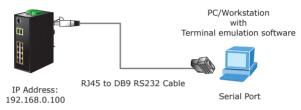


Figure 4-1: Industrial L2+ Managed Switch Console Connectivity

A terminal program is required to make the software connected to the Industrial L2+ Managed Switch. Windows' **Hyper Terminal** program may be a good choice. The Hyper Terminal can be accessed from the **Start** menu.

- 1. Click **START**, then **Programs**, **Accessories** and then **Hyper Terminal**.
- 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



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".



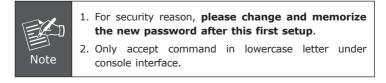
- 1. There are three switches (IGS-10080MFT/IGS-12040MT/ IGS-20040MT) with the RJ45 type console interface.
- 2. The following console screen is based on the IGS-10020HPT; the display of the IGS-10020HPT is the same as that of the IGS-10080MFT/IGS-12040MT/ IGS-20040MT.

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**

diag -p fis load -x linux OB signature validated tagel: 0x8000000, length 4507080 bytes nitrd: 0x80800000, length 188416 bytes ernel command line: init-Vasr/bin/Stage2-loader loglevel=4 Jose Sodting linux kernel: Base address 0x808080000 Entry 0x80100000 Cmdline : inite/var/bin/Stage2-loader loglevel=4 Active fis: linux
UG signature validated tsgal: 0x80100000, length 4507080 bytes nitrd: 0x80600000, length 188416 bytes ernel command line: init=/usr/bin/stage2-loader loglevel=4 'exec Base address 0x80080000 Entry 0x80100000 Cmdline : init=/usr/bin/stage2-loader loglevel=4 Active fis: linux
stagel: 0x80100000, length 4507080 bytes infrd: 0x8000000, length 188416 bytes ernel command line: init=/usr/bin/stage2-loader loglevel=4 exec Base address 0x80080000 Entry 0x80100000 Cmdline ; init=/usr/bin/stage2-loader loglevel=4 Active fis: linux
nitrd: 0x80600000, length 188416 bytes ernel command line: init=/usr/bin/stage2-loader loglevel=4 ewe dwe booting linux kernel: Base address 0x80080000 Entry 0x80100000 Omdline : init=/usr/bin/stage2-loader loglevel=4 Active fis: linux
iernel command linė: inīt=/usr/bin/stage2-loader loglevel=4 evace Base address 0x80080000 Entry 0x80100000 Čmdline ; inīt=/usr/bin/stage2-loader loglevel=4 Active fis: linux
rexec New booting linux kernel: Base address 0x80080000 Entry 0x80100000 Omdline : init≠/usr/bin/stage2-loader loglevel=4 Active fis: linux
lew booting linux kernel: Base address Dx80080000 Entry Dx80100000 Cmdline ; init≠/usr/bin/stage2-loader loglevel=4 Active fis: linux
Base address 0x80080000 Entry 0x80100000 Gmdline : init=/usr/bin/stage2-loader loglevel=4 Active fis: linux
Cmdline : init=/usr/bin/stage2-loader loglevel=4 Active fis: linux
Active fis: linux
0.371597] mx35 spi0.3: NAND Flash Disable (Caracal)
0:00:00 Stage 1 booted
0:00:01 Loading stage2 from NOR flash partition 'linux'
00:00:18 Overall: 17443 ms, ubifs = 1131 ms, rootfs 16141 ms of which xz = 0 ms
of which untar = 0 ms
10:00:37 Starting application
Jsing existing mount point for /switch/
Press ENTER to get started
Jsername: admin
assword:
GS-10020HPT#





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 4-4.

Press ENTER to get started		
Username: admin Password:		
IGS-10020HPT# show ip interface Interface Address	brief Method	Status
 VLAN 1 192.168.0.100/24 IGS-10020HPT#	Manual	DOWN

Figure 4-4: IP Information Screen

Configuration of the IP Address

 At the "#" prompt, enter the following command and press <Enter> as shown in Figure 4-5.

> IGS-10020HPT# configure terminal IGS-10020HPT[config)# interface vlan 1 IGS-10020HPT(config-if-vlan)# ip address 192.168.1.100 255.255.255.0

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 ENTER to get started				
Username: admin Password: IGS-10020HPT∰ show ip interface Istarface				
Interface Address	Method	Status		
VLAN 1 192.168.0.100/24		DOWN		
IGS-10020HPT# configure termina IGS-10020HPT(config)# interface	l vlan 1			
IGS-10020HPT(config-if-vlan)# i		192.168.1.100	255.255.255.0	
IGS-10020HPT(config-if-vlan)#				

Figure 4-5: Configuring IP Address Screen

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

Store the current switch configuration

- 5. At the "#" prompt, enter the following command and press <**Enter>**.
 - # copy running-config startup-config



Figure 4-6: Saving Current Configuration Command Screen

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 **<u>192.168.0.100</u>**, 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.

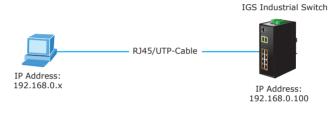


Figure 5-1: IP Management Diagram

5.1 Logging in to the Industrial L2+ Managed Switch

- Use Internet Explorer 8.0 or above for Web browser and enter IP address <u>http://192.168.0.100</u> (the factory-default IP address) to access the Web interface.
- 2. 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**

Authenti	cation required	
http://192.	168.0.100	
Your conne	ction to this site is not private	
Username	1	
Password		

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 that of the IGS-10080MFT/IGS-12040MT/IGS-20040MT.

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



Figure 5-3: 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	≥ Q₀ s	Security	🗘 Ring	M ONVIF	🔑 Maintenance
		Figure	5-4: Swite	ch Menu		
		IGS-1	0020MT			
		 Manage SNMP 	•			
		 RMON DHCP 	Server	-1		
		▶ Indus	trial Protoc	.01		

Figure 5-5: 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 5-6: Switch Menu - Switching

IGS-10020MT
 General Bandwidth Control Storm Control Differentiated Services QCL
Figure 5-7: Switch Menu QoS

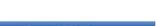




Figure 5-8: Switch Menu -- Maintenance

IGS-10020MT

- Access Security
- AAA
- Port Authentication
- Port Security
- Access Control List
- DHCP Snooping
- IP Source Guard
- ARP Inspection

Figure 5-9: Switch Menu -- Security

IGS-10020MT	
→ Ring	
▶ MEP	
▶ ERPS	
Ring Wizard	

Figure 5-10: Switch Menu - Ring

IGS-10020MT
- ONVIF
ONVIF Device Search
ONVIF Device List
Map Upload / Edit
Floor map

Figure 5-11: Switch Menu - ONVIF



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 startupconfiguration file will be loaded automatically across a system reboot.

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



Figure 5-12: 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.



Figure 5-13: 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 password to factory default mode (default password is **admin**), 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.

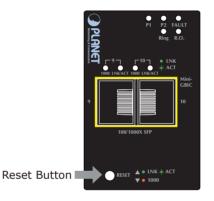


Figure 6-1: IGS-10020MT Reset Button

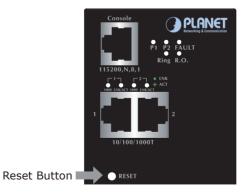


Figure 6-2: IGS-10080MFT Reset Button

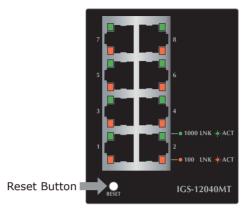


Figure 6-3: IGS-12040MT Reset Button

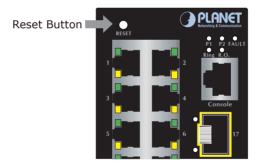


Figure 6-4: IGS-20040MT Reset Button

7. 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: support@planet.com.tw

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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