

**Industrial L3 16-Port 10/100/1000T 802.3at PoE +
2-Port 10/100/1000T + 2-Port 1G/2.5G SFP
Managed Ethernet Switch**

IGS-20160HPT

Quick Installation Guide

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1. Package Contents

Thank you for purchasing PLANET Industrial L3 16-Port 10/100/1000T 802.3at PoE + 2-Port 10/100/1000T + 2-Port 1G/2.5G SFP Managed Ethernet Switch. The description of this model is as follows:

Model	10/100/1000T RJ45 Ports	802.3at PoE+ Ports	1G/2.5G SFP Ports
IGS-20160HPT	18	16	2

“Industrial Managed PoE+ Switch” mentioned in this Quick Installation Guide refers to the above model.

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

Item	IGS-20160HPT
QR Code Sheet	■
DIN-rail Kit	■
Wall Mounting Kit	■
DB9 to RJ45 Interface RS232 Console Cable	■
RJ45 Dust Cap	19
SFP Dust Cap	2

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 Managed PoE+ 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 Managed PoE+ Switch. If the Web interface of the Industrial Managed PoE+ 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 Managed PoE+ 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-20160HPT: DC 48-54V**

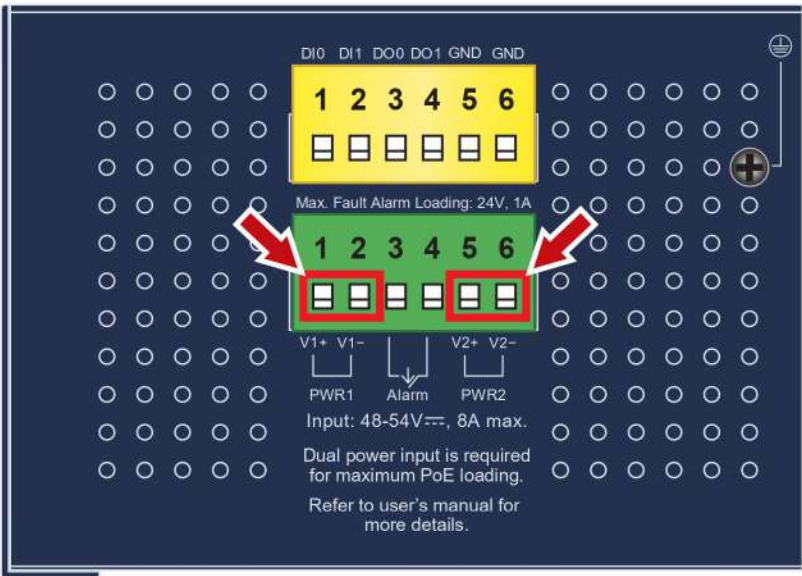
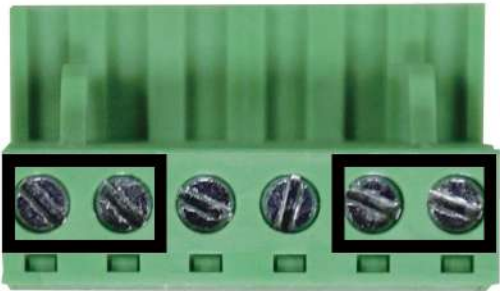


Figure 3-1: IGS-20160HPT Upper Panel

- 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
(DC1) (DC2)

Model	Positive (+) Pin	Negative (-) Pin
IGS-20160HPT	Pin 1/5	Pin 2/6

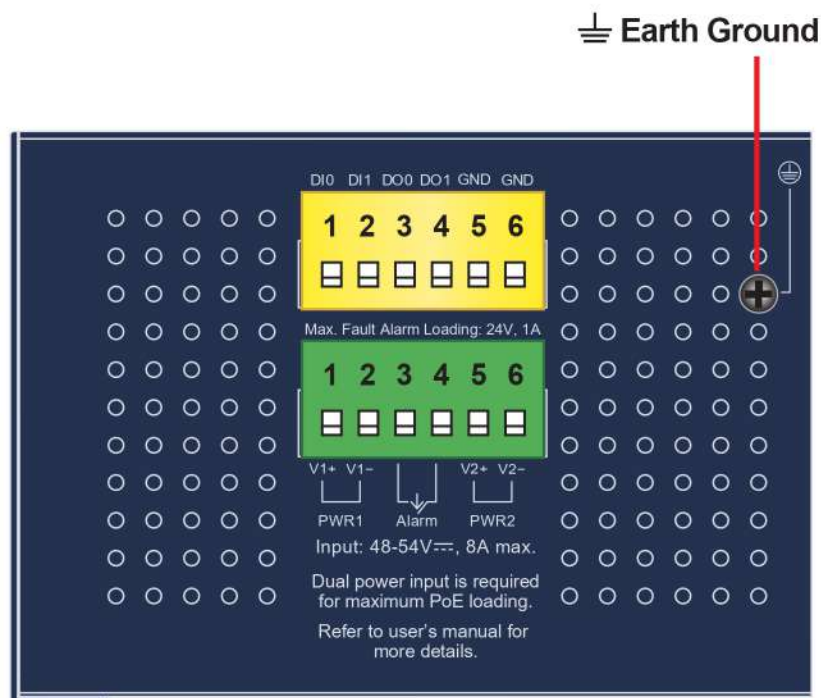


Note

1. The wire gauge for the terminal block should be in the range from **12** to **24 AWG**.
2. Please check the wire AWG Ampere specification before connecting PLANET Industrial Managed PoE+ Switch.

3.1 Grounding the Device

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



Note

EMD (Lightning) DAMAGE IS NOT COVERED UNDER WARRANTY.

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 Managed PoE+ Switch. The console port of the Industrial Managed PoE+ Switch is DCE already, so that you can connect the console port directly through PC without the need of null modem.

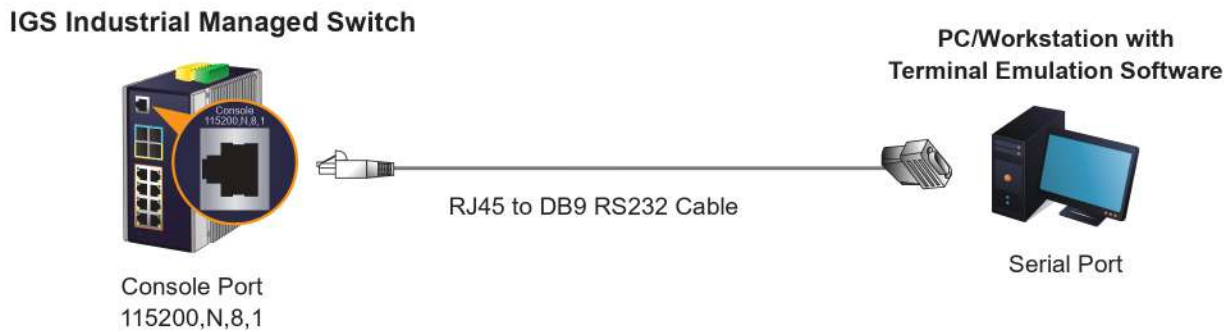


Figure 4-1: Industrial Managed PoE+ Switch Console Connectivity

A terminal program is required to make the software connected to the Industrial Managed PoE+ 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 Managed PoE+ Switch and the terminal will display "running testing procedures".

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**".



Note

The following console screen is based on the firmware version before **May of 2024**.

User Name: **admin**

Password: **admin**

```
Press ENTER to get started
```

```
Username: admin
```

```
Password:
```

```
IGS-20160HPT#
```

Figure 4-3: Console Login Screen



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.



Note

The following console screen is based on the firmware version of **May 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.

```
Generating file "startup-config.cfg"
===== Generating Startup Config Fil

===== Backup Config File Synchroniz
===== Backup Config File Synchroniz

Press any key to continue
Username: admin
Password: b*77*9*****
You are required to change and store
Please store your new password in a
Once configured, also store a copy o
Password: The password must contain
(New)Password: *****
Verify (New)Password: *****
Success.
Press any key to continue
Username: admin
Password: *****
IGS-20160HPT#
```

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

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

4.2 Configuring IP Address

The Industrial Managed PoE+ 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 PoE+ 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-20160HPT# show ip interface brief
Interface  Address                Method  Status
-----
VLAN 1    192.168.0.100/24       Manual  UP
IGS-20160HPT#
```

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-20160HPT# configure terminal
IGS-20160HPT(config)# interface vlan 1
IGS-20160HPT(config-if-vlan)# ip address 192.168.1.100 255.255.255.0
```

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

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

```
IGS-20160HPT# configure terminal
IGS-20160HPT(config)# interface vlan 1
IGS-20160HPT(config-if-vlan)# ip address 192.168.1.100 255.255.255.0
IGS-20160HPT(config-if-vlan)#
```

Figure 4-7: 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
```

```
Press ENTER to get started
Username: admin
Password:
IGS-20160HPT# configure terminal
IGS-20160HPT(config)# interface vlan 1
IGS-20160HPT(config-if-vlan)# ip address 192.168.1.100 255.255.255.0
IGS-20160HPT(config-if-vlan)# exit
IGS-20160HPT(config)# exit
IGS-20160HPT# copy running-config startup-config
Building configuration...
do not reset or power off the device!
% Saving 5350 bytes to flash:startup-config
IGS-20160HPT#
```

Figure 4-8: Saving Current Configuration Command Screen

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



Note

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 Managed PoE+ Switch. Note the Industrial Managed PoE+ 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 Managed PoE+ 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.

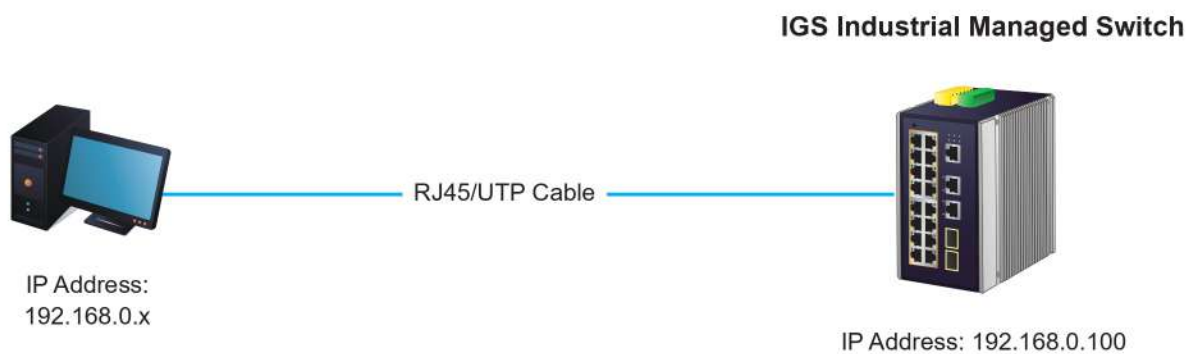


Figure 5-1: IP Management Diagram

5.1 Logging in to the Industrial Managed PoE+ Switch

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



Note

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

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**

The image shows a web browser dialog box titled "Authentication required". Below the title, it displays the URL "https://192.168.0.100" and a warning message: "Your connection to this site is not private". There are two input fields: "Username" and "Password". At the bottom right, there are two buttons: "Log in" (in blue) and "Cancel" (in grey).

Figure 5-2: Web Login Screen

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 **March of 2024 or after**.

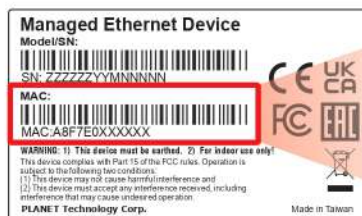
- When the following dialog box appears, please enter the default user name **"admin"** and the password. Refer to **Section 4.1** to determine your initial login password.

Default IP Address: **192.168.0.100**

Default User Name: **admin**

Default Password: **sw + the last 6 characters of the MAC ID in lowercase**

- 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

Authentication required

https://192.168.0.100

Your connection to this site is not private

Username

Password

Figure 5-4: Login Screen

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

Change Password

New Password	
Password	<input type="password"/> <input type="checkbox"/> show password
Retype Password	<input type="password"/>

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

- 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 Managed PoE+ Switch

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



Figure 5-7: Switch Menu



Figure 5-8: Switch Sub-menu



Figure 5-9: Switch Sub-menu

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



Note

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.

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.



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



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

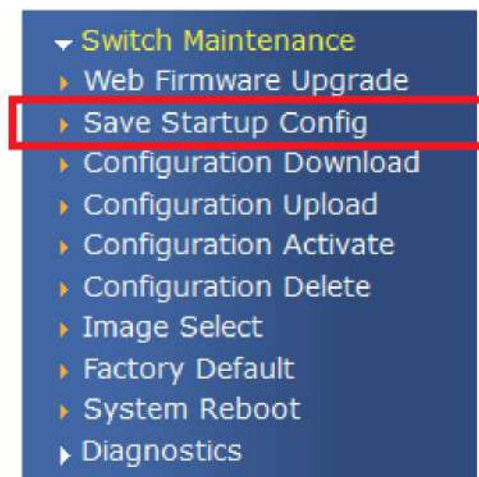


Figure 5-10: Save Config -- Maintenance

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"** 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.

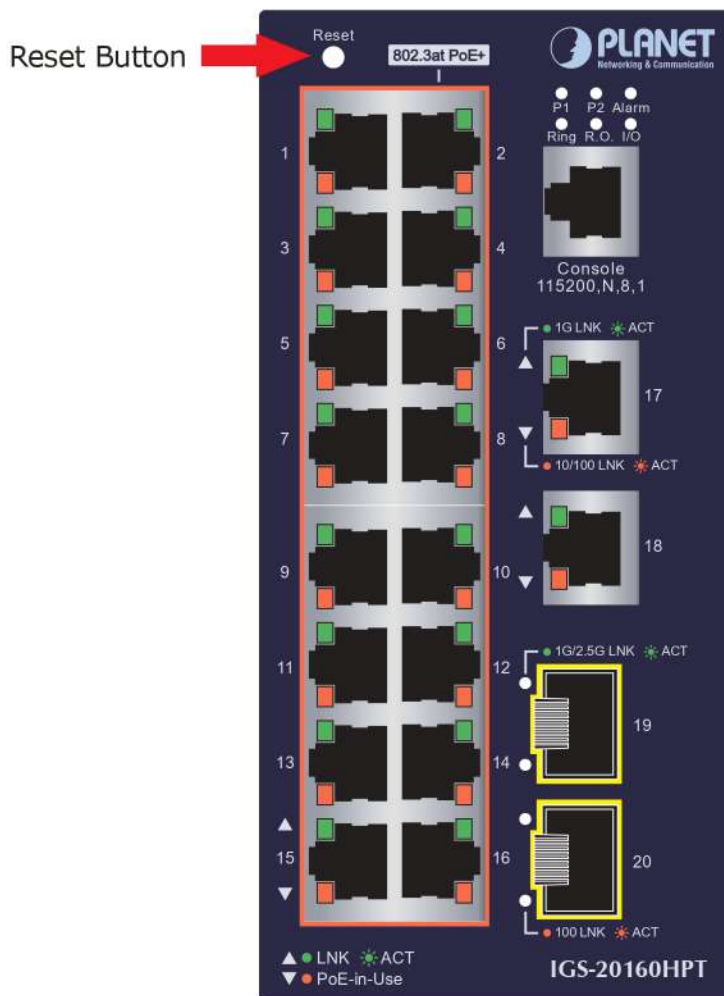


Figure 6-1: IGS-20160HPT Reset Button

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:

<https://www.planet.com.tw/en/support/faq>

Switch support team mail address:

support@planet.com.tw

IGS-20160HPT User's Manual:

<https://www.planet.com.tw/en/support/downloads?&method=keyword&keyword=IGS-20160HPT&view=3#list>



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

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