Industrial IP67-rated 4-Port 10/100/1000T 802.3at PoE + 2-Port 10/100/1000T M12 Managed Ethernet Switch (-40~75 degrees C)

IGS-604HPT-M12

Quick Installation Guide

Table of Contents

1. Package Contents

Thank you for purchasing PLANET Industrial M12 Managed Ethernet Switch. **"Industrial Managed Switch"** is used as an alternative name in this Quick Installation Guide. Open the box of the Industrial Managed Switch and carefully unpack it. The box should contain the following items:

1 x The Industrial Managed Switch	1 x Quick Installation Guide
1 x 2m 8-pin A-code M12-to-RJ45 UTP Cable	1 x DIN Rail Kit
1 x 1.2m 5-pin A-code M12 Power Cable	1 x Wall-mount Kit

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

2. Hardware Introduction

2.1 Physical Dimensions

Dimensions (unit = mm)

Mounting Kit

Rear View

Mounting Kit

Side View

Top View

Front View

Bottom View

Side View
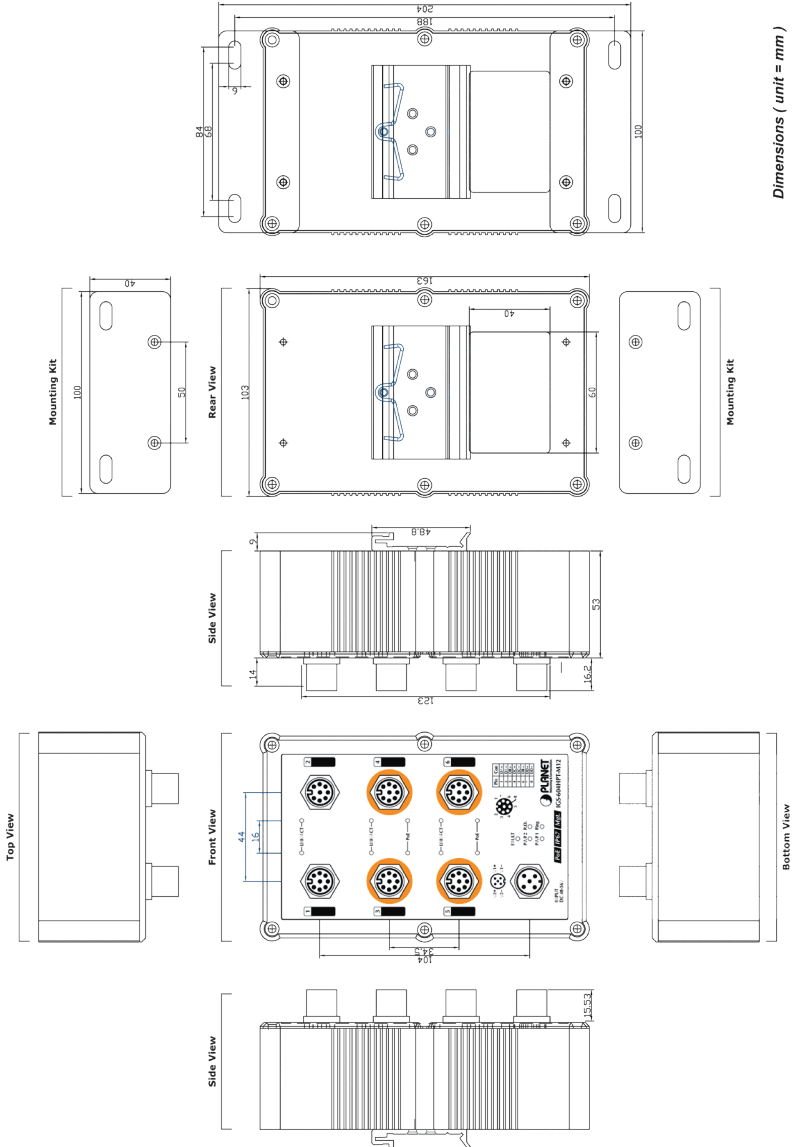
2.2 Switch Front Panel Layout

Figure 2-1 shows the front panel of the Industrial Managed Switch.
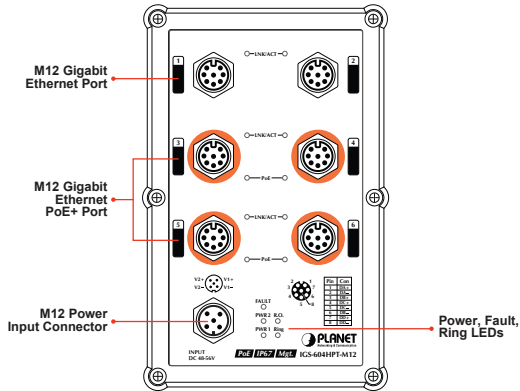
Figure 2-2: IGS-604HPT-M12 Front Panel

2.3 LED Indicators

■ **System**

LED	Color	Function	
PWR 1	Green	Lights to indicate DC power input 1 has power.	
PWR 2	Green	Lights to indicate DC power input 2 has power.	
Fault	Red	Lights to indicate that the Industrial Switch has failed	
Ring	Green	Lights to indicate that the ERPS Ring has been created successfully.	
R.O.	Green	Lights	To indicate the Ring Owner has been enabled and the state is in idle mode.
		Blinks	To indicate the Ring state is in protect mode.
		Off	To indicate that the Ring Owner hasn't been enabled.

■ **Per 10/100/1000BASE-T Port (Port 1~2)**

LED	Color	Function	
LNK/ACT	Green	Lights	To indicate the port is running in 10/10/1000Mbps speed and successfully established.
		Blinks	To indicate the switch is actively sending or receiving data over that port.

■ **Per 10/100/1000BASE-T PoE+ Port (Port 3~6)**

| LED	Color	Function	
LNK/ACT	Green	Lights	To indicate the port is running in 10/10/1000Mbps speed and successfully established.
		Blinks	To indicate the switch is actively sending or receiving data over that port.
PoE-in-Use	Orange	Lights	To indicate the port is providing 45~55 V DC in-line power.
		Off	To indicate the connected device is not a PoE powered device (PD).

2.4 M12 10/100/1000T Connector Pin Assignment

The Industrial Managed Switch front panel provides six 10/100/1000BASE-T Ethernet ports in the form of M12 8-pin A-coded female connector. These ports are designed for Ethernet equipment connection through Cat5/5e UTP cables. The M12 input interface pinout is shown below:

Pin	Con
1	DA+
2	DA−
3	DB+
4	DC+
5	DC−
6	DB−
7	DD+
8	DD−
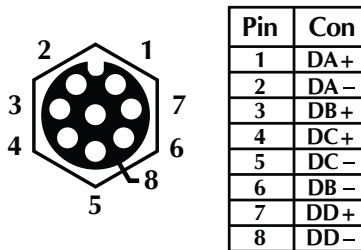
8-pin M12 Female 10/100/1000T Connector Pin Assignment

2.5 M12 (8-pin, Male) to RJ45 (8-pin) Straight-through UTP Cable Wiring
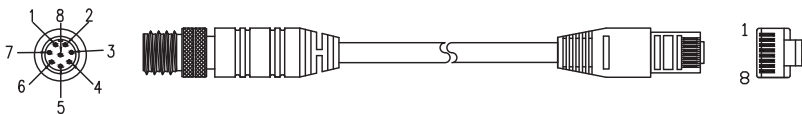
| M12 A-code Male Connector Pin No.	MDI 1000BASE-T Signal ID	T568B Color	RJ45 connector Pin No.
1	BI_DA+	white/orange	1
2	BI_DA-	orange	2
3	BI_DB+	white/green	3
4	BI_DC+	blue	4
5	BI_DC-	white/blue	5
6	BI_DB-	green	6
7	BI_DD+	white/brown	7
8	BI_DD-	brown	8

Note

As each Ethernet port of the Industrial Managed Switch is running in auto negotiation mode, make sure the Ethernet ports of the corresponding Ethernet devices are also running in auto negotiation mode, otherwise, the Ethernet performance will be poor.

Note
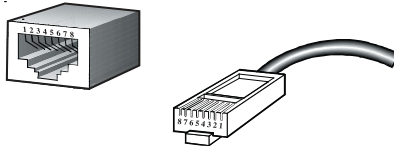

The standard RJ45 receptacle/connector
There are 8 wires on a standard UTP/STP cable and each wire is color-coded. The following shows the pin allocation and colors of straight-through cable connection:

Please make sure your waterproof RJ45 cables are with same pin assignment and colors as the above picture before deploying the cables into your network.

2.6 M12 DC Power Connector Pin Assignment

The front panel of the Industrial Managed Switch provides one M12 A-coded 5-pin male connector for dual DC power input.
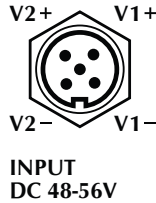
INPUT
DC 48-56V

2.7 M12 DC Power Cable Wiring

Please use the power cable with the M12 A-coded 5-pin female connector from the Industrial Managed Switch package for DC power input. The M12 DC power cable pin assignment is shown below:

M12 DC power cable pin assignment & wire code	
	V1 positive (+) pin = black cable
	V1 negative (-) pin = brown cable
	V2 positive (+) pin = blue cable
	V2 negative (-) pin = white cable

Note	1. Make sure you connect the correct power pin to your DC power source. 2. The wire gauge for the power cable should be in the range of 12 ~ 24 AWG. 3. The DC power input range is 48 ~ 56V DC.

3. Connecting M12 Cable to the IGS-604HPT-M12

Step 1: Turn counterclockwise to remove the waterproof screw nuts of an M12 connector and power input.

Step 2: Insert the M12 UTP male connector into the M12 female Gigabit Ethernet port of the Industrial Managed Switch.

Step 3: Turn clockwise to tighten the screw nut of the M12 connector and make sure the connection is tight.

Step 4: Insert the M12 power female connector into the M12 male port of the power input.

Step 5: Turn clockwise to tighten the screw nut of the M12 power connector.

Note	Before connecting the DC power cord, please check whether your local DC power source is stable.

Note	Make sure to tightly close all interfaces to have waterproof effect.

4. Switch Management

4.1 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.

Workstations are installed with Ethernet NIC (Network Interface Card)

Ethernet Port Connection

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

➢ The above PC is installed with Web browser and JAVA runtime environment plug-in.

Note	It is recommended to use Internet Explore 8.0 or above 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.

4.2 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**.

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.

**PC / Workstation
with Web Browser
192.168.0.x**

**Industrial
Managed Switch**

RJ45/UTP Cable

**IP Address:
192.168.0.100**
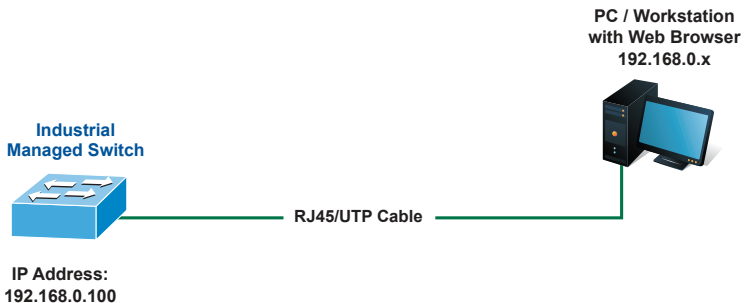
IP Management Diagram

4.3 Logging in the Industrial Managed Switch

1. Use Internet Explorer 8.0 or above Web browser and enter IP address **http://192.168.0.100** (default IP address) to access the Web interface.

2. When the following dialog box appears, please enter the default user name and password **"admin"**. The login screen in Figure 4-1 appears.

Default IP Address: **192.168.0.100**
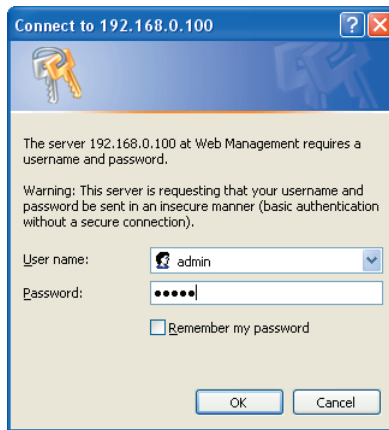Default Username: **admin**
Default Password: **admin**

Figure 4-1: Login Screen

3. After entering the password, the main screen appears as Figure 4-2 shows.

Figure 4-2: 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 4-3: Switch Menu

|	
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.

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

4.4 Saving Configuration via Web

In the Industrial Managed Switch, the running configuration file is stored in the RAM. In the current version, the running configuration sequence of **running-config** can be saved from the RAM to FLASH by executing save startup config command, so that the running configuration sequence becomes the startup configuration file, which is called configuration save.

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 **System, Save Startup Config.**
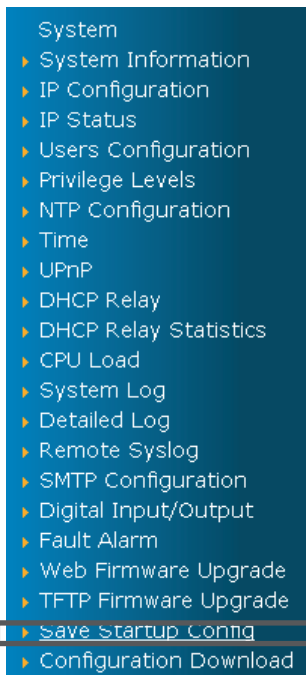
2. Press the **"Save Configuration"** button.

5. Recovering Back to Default Configuration

■ **IP address has been changed or admin password has been forgotten –**

1. Power off the Industrial Managed Switch and remove all the existing connections.

2. Use the straight RJ45 cable to connect to port 1 and port 2 in the loop topology as shown below:

3. Power on the Industrial Managed Switch and 6 LNK/ACT LEDs will be lit.

4. Resetting Industrial Managed Switch to the factory default is done when 6 LNK/ACT LEDs are lit again.

5. Remove the RJ45 cable from port 1 and port 2.

6. Reset the Industrial Managed Switch to Factory Default configuration. The Industrial Managed Switch will then reboot and load the default settings as shown below:

> Default Username: **admin**
> Default Password: **admin**
> Default IP Address: **192.168.0.100**
> Default Subnet Mask: **255.255.255.0**
> Default Gateway: **192.168.0.254**

6. Customer Support

Thank you for purchasing PLANET products. You can browse our online FAQ resource and User's Manual 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 FAQ:
http://www.planet.com.tw/en/support/faq.php?type=1

Switch support team mail address:
support_switch@planet.com.tw

IGS-604HPT-M12 User's Manual:
http://www.planet.com.tw/en/support/download.php?type1=22153&model=48896&type=3

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