

**Industrial IP67-rated 6-Port Gigabit
Managed Ethernet Switch**

IGS-5227-6T/IGS-5227-6MT/IGS-5227-6MT-X

Quick Installation Guide

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1. Package Contents

Thank you for purchasing PLANET Industrial L2+ Managed Ethernet Switch. The descriptions of this series are shown below:

IGS-5227-6T	Industrial IP67-rated 6-Port 10/100/1000T Managed Ethernet Switch (-40~75 degrees C)
IGS-5227-6MT	Industrial IP67-rated 6-Port 10/100/1000T M12 Managed Ethernet Switch (-40~75 degrees C, A-coded M12)
IGS-5227-6MT-X	Industrial IP67-rated 6-Port 10/100/1000T M12 Managed Ethernet Switch (-40~75 degrees C, X-coded M12)

“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:

	IGS-5227-6T	IGS-5227-6MT	IGS-5227-6MT-X
The Industrial Managed Switch	■	■	■
Quick Installation Guide	■	■	■
1.2m M12 Power Cable	■	■	■
Waterproof RJ45 Connector	6	—	—
2m 8-pin A-coded M12-to-RJ45 UTP Cable	—	■	—
2m 8-pin X-coded M12-to-RJ45 UTP Cable	—	—	■
DIN-rail Kit	■	■	■
Wall-mount Kit	■	■	■

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

2. Making Waterproof RJ45 Cable (IGS-5227-6T)

Please read the following instructions and follow the procedures in the order being presented:

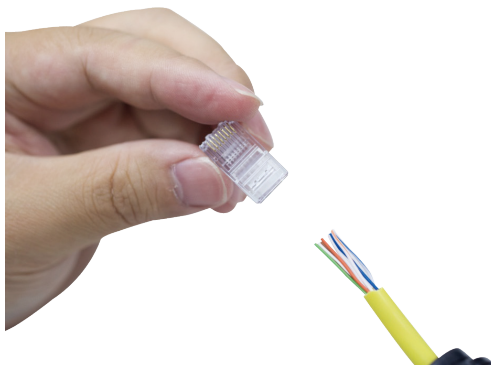
Step 1: Take a waterproof RJ45 jack out from the Industrial Managed Switch box and get hold of one RJ45 cable.



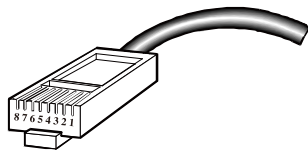
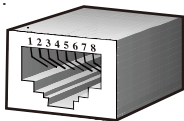
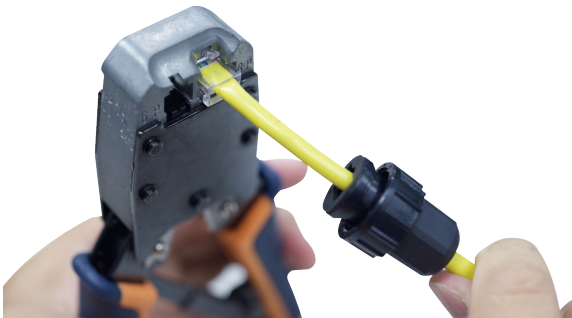
Step 2: Insert the RJ45 cable through the waterproof RJ45 jack.



Step 3: Prepare an RJ45 connector.



Step 4: Put the RJ45 connector in place with cable crimper.



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:



Note

Straight Cable		SIDE 1	SIDE 2
1 2 3 4 5 6 7 8	SIDE 1	1 = White/Orange 2 = Orange 3 = White/Green 4 = Blue 5 = White/Blue 6 = Green 7 = White/Brown 8 = Brown	1 = White/Orange 2 = Orange 3 = White/Green 4 = Blue 5 = White/Blue 6 = Green 7 = White/Brown 8 = Brown
1 2 3 4 5 6 7 8	SIDE 2		

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.

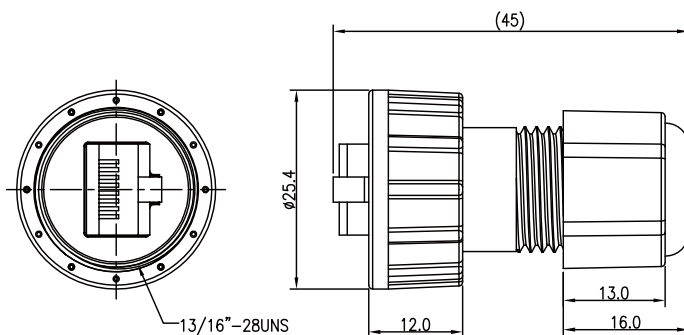
Step 5: To lock in the RJ45 connector, pull back the cable till the connector nicely fits into the waterproof connector hole.



1. Use only the waterproof RJ45 connector provided in the package of the IGS-5227-6T.
2. If the waterproof RJ45 connector is found missing or damaged, please contact your local reseller where you purchased from. If the new waterproof RJ45 connector is obtained from PLANET, make sure its dimensions are the same.



Note



3. Never use any waterproof RJ45 connector that is not purchased from PLANET or doesn't have the same dimensions of the IGS-5227-6T; it will damage the device permanently.

3. Connecting Waterproof Cable to the IGS-5227-6T



Note

Follow all the connecting waterproof cable steps as shown in the example.

Step 1: Turn counterclockwise to remove the waterproof screw nuts of a RJ45 port and power input.



Step 2: Insert the waterproof RJ45 connector into the port of the Industrial Managed Switch.



Step 3: Turn clockwise to tighten the screw nut of the waterproof RJ45 connector.



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



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



Caution

To have the waterproof effect, connectors must be totally tightened, otherwise, it would invalidate your warranty.

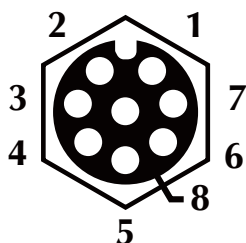


Note

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

4. M12 A-coded Connector Pin Assignment

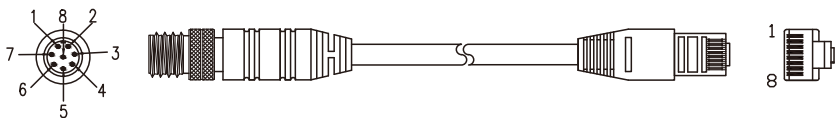
The **IGS-5227-6MT** front panel provides six 10/100/1000BASE-T Ethernet ports in the form of **M12 8-pin A-coded female** connector. These ports are designed for Ethernet equipment connection through Cat5/5e UTP cables. The M12 8-pin A-coded input interface pinout is shown below:



Pin	Con
1	DA+
2	DA-
3	DB+
4	DC+
5	DC-
6	DB-
7	DD+
8	DD-

8-pin M12 A-coded Female 10/100/1000T Connector Pin Assignment

5. M12 (8-pin, A-coded Male) to RJ45 (8-pin) Straight-through UTP Cabling



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

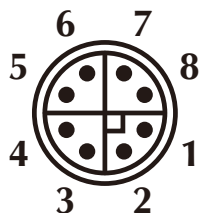


Note

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.

6. M12 X-coded Connector Pin Assignment

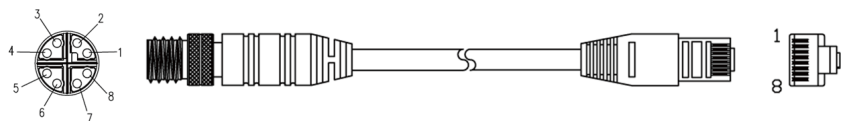
The **IGS-5227-6MT-X** front panel provides six 10/100/1000BASE-T Ethernet ports in the form of **M12 8-pin X-coded female** connector. These ports are designed for Ethernet equipment connection through Cat5/5e UTP cables. The M12 8-pin X-coded input interface pinout is shown below:



Pin	Con
1	DA+
2	DA-
3	DB+
4	DB-
5	DD+
6	DD-
7	DC-
8	DC+

8-pin M12 X-coded Female 10/100/1000T Connector Pin Assignment

7. M12 (8-pin, X-coded Male) to RJ45 (8-pin) Straight-through UTP Cabling



M12 X-coded 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_DB-	green	6
5	BI_DD+	white/brown	7
6	BI_DD-	brown	8
7	BI_DC-	White/blue	5
8	BI_DC+	blue	4



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.

8. Connecting M12 Cable to the IGS-5227-6MT/ IGS-5227-6MT-X



Note

Follow all the connecting M12 cable to the IGS-5227-6MT/IGS-5227-6MT-X steps as shown in the example.

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.



Caution

To have the waterproof effect, connectors must be totally tightened, otherwise, it would invalidate your warranty.



Note

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

9. M12 DC Power Cable Pin Assignment

The front panel of the Industrial Managed Switch provides one M12 DC power 5-pin male connector for DC power input. Please use the power cable with the M12 DC power 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 and wiring code	
	V1 positive (+) pin = black cable
	V1 negative (-) pin = brown cable
	V2 positive (+) pin = blue cable
	V2 negative (-) pin = white cable



Note

- A. Make sure you connect the correct power pin to your DC power source.
 1. The wire gauge for the power cable should be in the range of 12 ~ 24 AWG.
 2. The DC power input range is 9 ~ 48V DC.
- B. There are two methods to install the Industrial Managed Switch – DIN-rail mounting and wall-mount plate mounting. For more detailed information, please refer to Chapter 2.3 of the user's manual.

10. Requirements

Workstations running Windows XP/2003/2008/Vista/7/8/10, 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.



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.

11. 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.

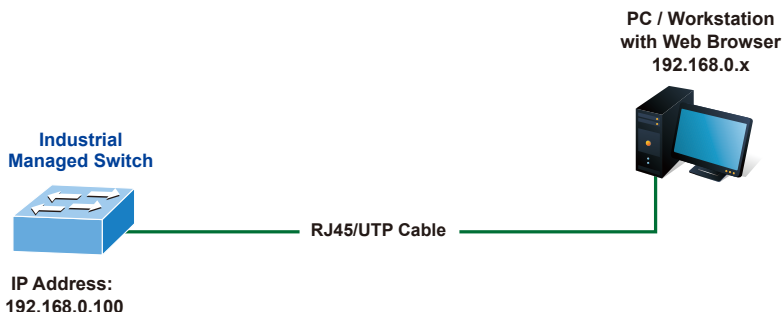


Figure 11-1: IP Management Diagram

Logging in to 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 11-2 appears.

Default Username: **admin**

Default Password: **admin**

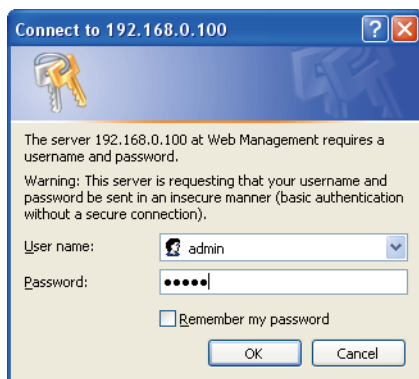


Figure 11-2: Login Screen

3. After entering the password, the main screen appears as Figure 11-3 shows.



Figure 11-3: 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.

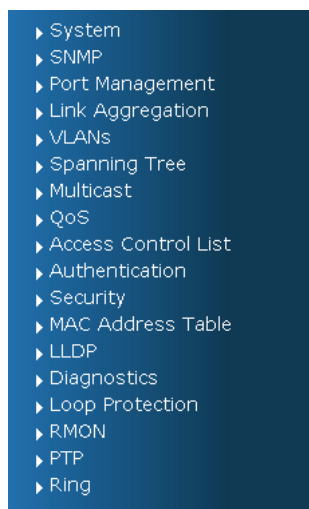


Figure 11-4: Switch Menu



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.

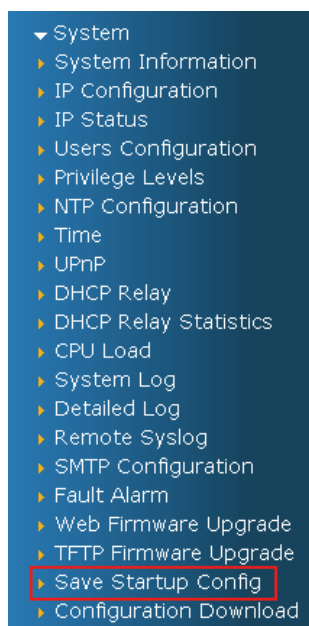
Now, you can use the Web management interface to continue the Switch management. Please refer to the user's manual for more details.

12. 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.



13. Recovering Back to Default Configuration

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



Note

Follow all the recovering back to default configuration steps as shown in the example.

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**

14. 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:

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

Switch support team mail address:

support@planet.com.tw

IGS-5227-6T/IGS-5227-6MT/IGS-5227-6MT-X User's Manual:

<https://www.planet.com.tw/en/support/downloads?method=category&c1=industrial-ethernet&p=&type=3>



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

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