

**Industrial Layer 3 Managed
Ethernet Switch**

ITS-6326 Series

Quick Installation Guide

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1. Package Contents

Thank you for purchasing **PLANET Industrial Managed Ethernet Switch, ITS-6326 series**. The descriptions of these models are as follows:

■ Wide Voltage (WV) Input Range Series

Model	Description
ITS-6326-16P2TB2XS-WV	Industrial L3 16-Port 10/100/1000T 802.3at PoE+ M12 + 2-Port 10GBASE-T M12 Bypass + 2-Port 10G Q-ODC Managed Ethernet Switch with dual wide voltage input of 24 to 110 VDC.
ITS-6326-16P2T2XS-WV	Industrial L3 16-Port 10/100/1000T 802.3at PoE+ M12 + 2-Port 10GBASE-T M12 + 2-Port 10G Q-ODC Managed Ethernet Switch with dual wide voltage input of 24 to 110 VDC.
ITS-6326-8P10T2XS-WV	Industrial L3 8-Port 10/100/1000T 802.3at PoE+ M12 + 8-Port 10/100/1000T M12 + 2-Port 10GBASE-T M12 + 2-Port 10G Q-ODC Managed Ethernet Switch with dual wide voltage input of 24 to 110 VDC.
ITS-6326-16P2TB-WV	Industrial L3 16-Port 10/100/1000T 802.3at PoE+ M12 + 2-Port 10GBASE-T M12 Bypass Managed Ethernet Switch with dual wide voltage input of 24 to 110 VDC.
ITS-6326-16P2T-WV	Industrial L3 16-Port 10/100/1000T 802.3at PoE+ M12 + 2-Port 10GBASE-T M12 Managed Ethernet Switch with dual wide voltage input of 24 to 110 VDC.
ITS-6326-16P-WV	Industrial L3 16-Port 10/100/1000T 802.3at PoE+ M12 Managed Ethernet Switch with dual wide voltage input of 24 to 110 VDC.
ITS-6326-8P8T-WV	Industrial L3 8-Port 10/100/1000T 802.3at PoE+ M12 + 8-Port 10/100/1000T M12 Managed Ethernet Switch with dual wide voltage input of 24 to 110 VDC.
ITS-6326-18T2XS-WV	Industrial L3 16-Port 10/100/1000T M12 + 2-Port 10GBASE-T M12 + 2-Port 10G Q-ODC Managed Ethernet Switch with dual wide voltage input of 24 to 110 VDC.
ITS-6326-16T-WV	Industrial L3 16-Port 10/100/1000T M12 Managed Ethernet Switch with dual wide voltage input of 24 to 110 VDC.

■ Low Voltage (LV) Input Range Series

Model	Description
ITS-6326-16P-LV	Industrial L3 16-Port 10/100/1000T 802.3at PoE+ M12 Managed Ethernet Switch with dual voltage input of 24 to 54 VDC.
ITS-6326-8P8T-LV	Industrial L3 8-Port 10/100/1000T 802.3at PoE+ M12 + 8-Port 10/100/1000T M12 Managed Ethernet Switch with dual voltage input of 24 to 54 VDC.
ITS-6326-16T-LV	Industrial L3 16-Port 10/100/1000T M12 Managed Ethernet Switch with dual voltage input of 24 to 54 VDC.

In this guide, the term **“Industrial Managed Switch”** refers specifically to the above models.

Open the box of the Industrial Managed Switch and carefully unpack it. The box should contain the following items for each model:

- The Industrial Managed Switch x 1
- Quick Installation Guide Sheet x 1
- Wall-mounted Kit x 1
- 2m 8-pin X-coded M12-to-RJ45 UTP Cable x 1
- Protective Caps for each I/O Connector (already fixed on switch)

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

2. Recommended Optional Accessories

Accessories	
CB-M12A5USB-100	5 Pin A-Coded M12 Female to USB Type-A Cable, 1 meters
CB-M12A5FF-120	5-Pin A-Coded M12 Female to bare end power or I/O cable, 1.2 meters
CB-M12X8MRJ-200	8-Pin X-Coded M12 Male to RJ45 Ethernet Cable, 2 meters
CB-M12X8M10G-200	8-Pin X-Coded M12 Male to RJ45 Ethernet Cat 6A (10G) Cable, 2 meters
CB-M23F5F-120	5-Pin M23 Female to bare end power cable, 1.2 meters
CB-QODC10G-600	Q-ODC 2 Plug/LC Single-Mode Fiber Cable, 6 meters

3. Connector Pin Assignment

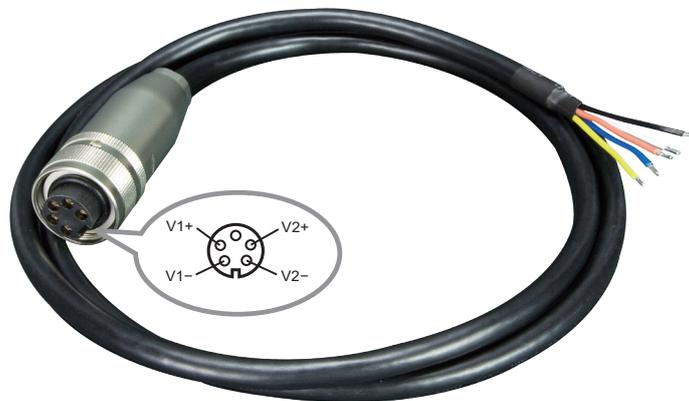
3.1 M23 DC Power Cable Pin Assignment

The front panel of the ITS-6326 Series features an **M23 5-pin male connector** for **DC power input**. Please use the power cable with the included **M23 5-pin female connector** from the Industrial Managed Switch package for DC power input. The pin assignment for the M23 DC power cable is illustrated below:

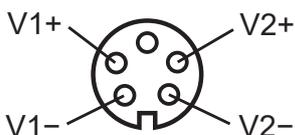


Note

1. The box does not contain the **M23 5-pin A-coded female connector power cable**.
2. Please contact your local reseller to purchase **CB-M23F5F-120** from PLANET.



CB-M23F5F-120 M23 DC power cable pin assignment and wiring code



V1 positive (+) pin = white cable

V1 negative (-) pin = brown cable

V2 positive (+) pin = black cable

V2 negative (-) pin = yellow cable

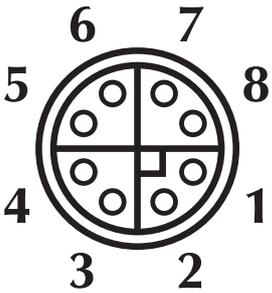


Note

- 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 24 ~ 110V DC (WV Series) or 24 ~ 54V DC (LV Series).

3.2 M12 X-coded Ethernet Port Connector Pin Assignment

The front panel of the ITS-6326 Series features **1G/10GBASE-T Ethernet ports** that utilize **M12 8-pin X-coded female connectors**. These ports are designed for connecting Ethernet equipment via Cat5/5e/6A UTP cables. The pinout for the M12 8-pin X-coded input interface is illustrated below:



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

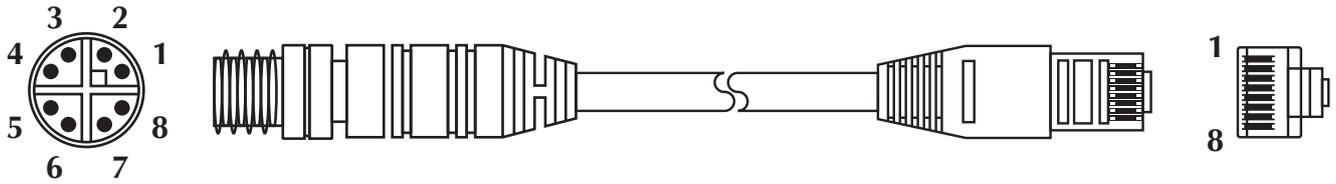
8-pin M12 X-coded Female 1G/10GBASE-T Connector Pin Assignment



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.

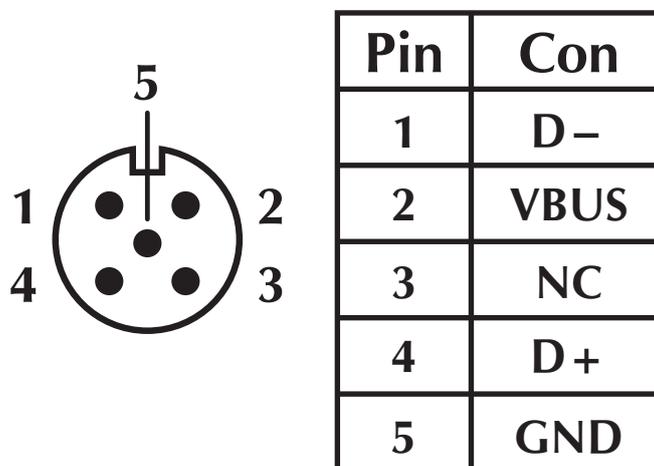
■ M12 (8-pin, X-coded Male) to RJ45 (8-pin) Straight-through UTP Cabling



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

3.3 M12 A-coded USB Console Port Connector Pin Assignment

The front panel of the ITS-6326 Series features a **USB console port** that utilizes an **M12 5-pin A-coded male connector**. Users can connect to the workstation using either an adapter or the CB-M12A5USB-100 cable. The pinout for the M12 5-pin A-coded input interface is illustrated below:



5-pin M12 A-coded Male Connector Pin Assignment - USB Console Port

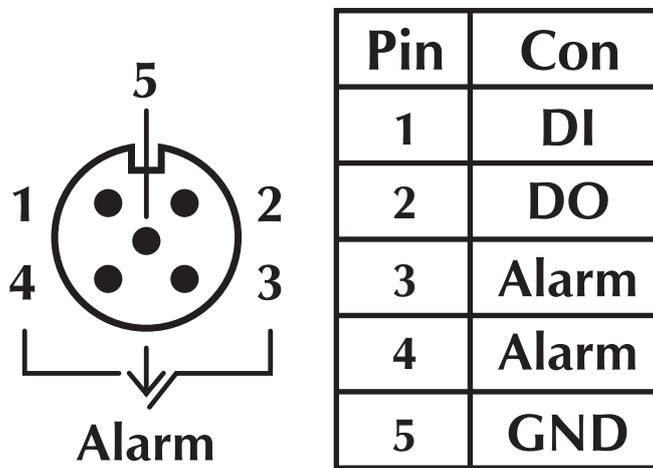


Note

The **CB-M12A5USB-100** cable is not included in the package. If needed, please contact your local reseller to purchase the cable from PLANET.

3.4 M12 A-coded Alarm & DI/DO Connector Pin Assignment

The front panel of the ITS-6326 Series includes alarm and digital input/output functions that utilize an **M12 5-pin A-coded male connector**. Users can connect to the workstation using either an adapter or the CB-M12A5FF-120 cables. The pinout for the M12 5-pin A-coded input interface is illustrated below:



5-pin M12 A-coded Male Connector Pin Assignment - Alarm & DI/DO

CB-M12A5FF-120 cables pin assignment and wiring code	
Function Description	Cable Color
Digital Input (DI)	White
Digital Output (DO)	Brown
Alarm	Black
Alarm	Blue
GND	Green



Note

The **CB-M12A5FF-120** cable is not included in the package. If needed, please contact your local reseller to purchase the cable from PLANET.

4. Requirements

- **Workstations** running Windows 10/11, MAC OS 10.15 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 network (UTP) cables with M12 (X-coded) and RJ45 connectors.
 - The above Workstations are installed with Web browser.



Note

It is recommended to use Google Chrome, Microsoft Edge or FireFox 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.

- **Serial Port Connection** (Terminal)
 - The above Workstations come with USB ports
 - The above Workstations have been installed with **terminal emulator**, such as Tera Term or PuTTY.
 - USB cable (P/N: **CB-M12A5USB-100**) – One end is attached to the USB port on the computer and the other end is connected to the USB M12 console port of the Industrial Managed Switch.

5 Hardware Installation



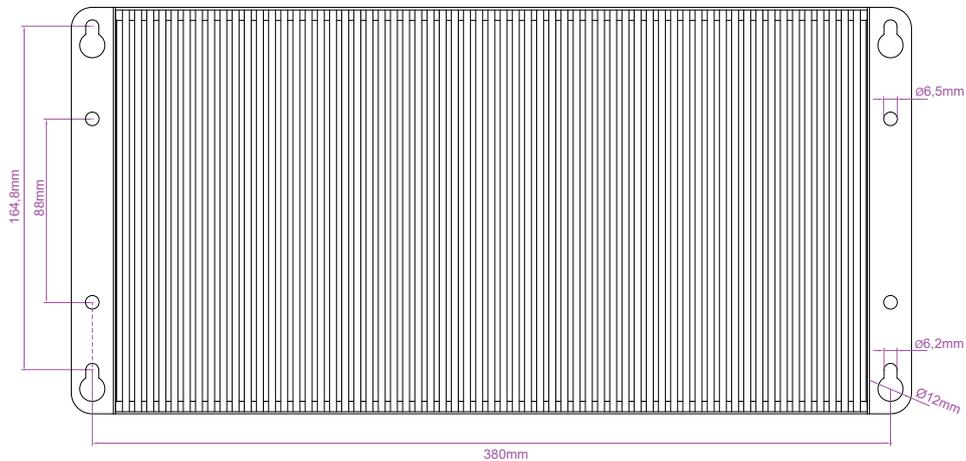
Note

The following hardware installation is based on the ITS-6326-16P2T2XS-WV, and the process is the same for other models in the ITS-6326 series.

5.1 Wall Mount Installation

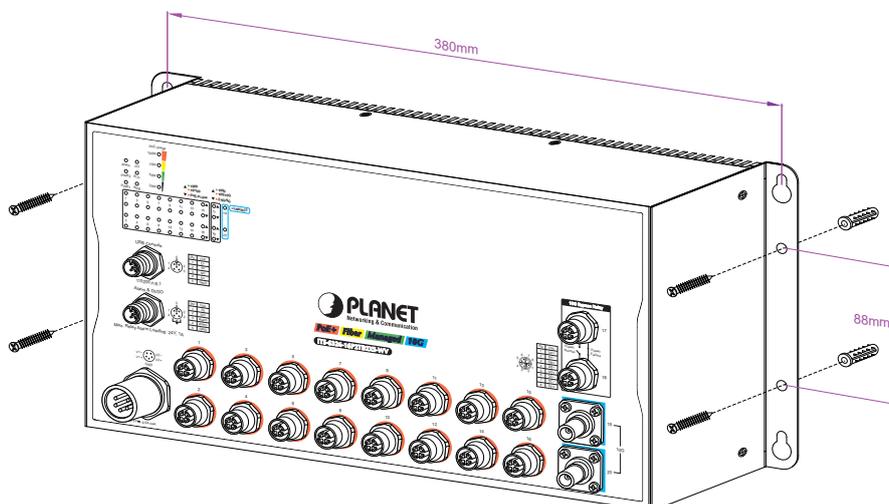
To install the Industrial Managed Switch on the Wall, simply follow the following steps:

Step 1: Four holes with an 8mm diameter are required in the wall. The distances between the four holes are shown below.



Step 2: Install a conductor pipe inside the board hole and flush the edge of the conductor pipe with the wall surface.

Step 3: Screw the bolts into the conductor pipe. The Industrial Managed Switch is between bolts and conductor pipe, as shown below.

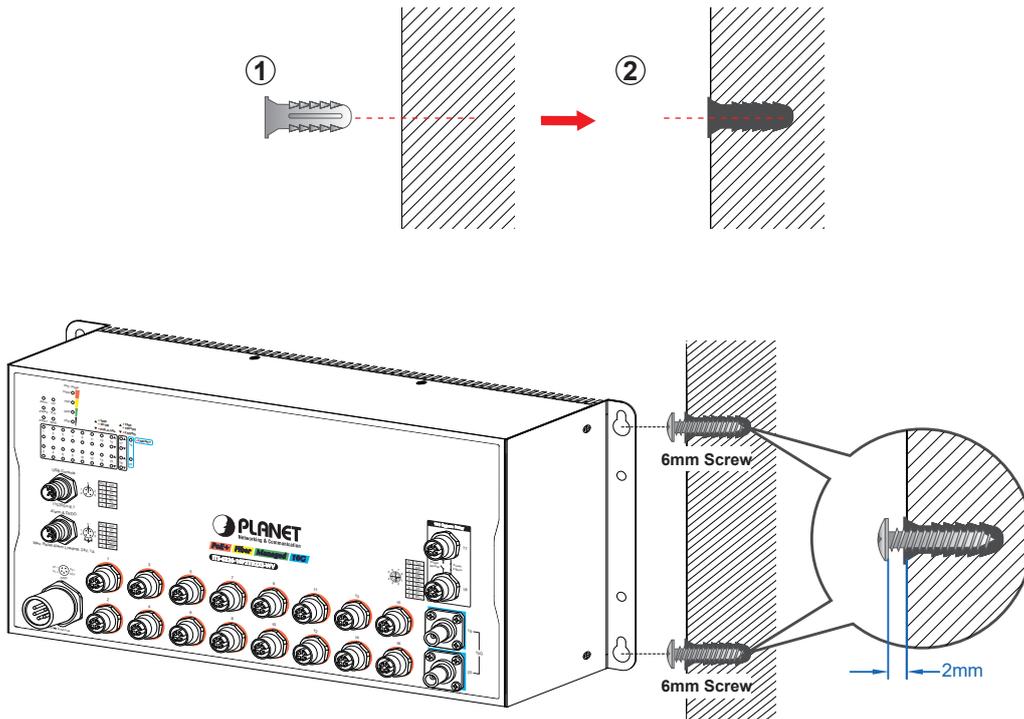


5.2 Wall Hanging Installation

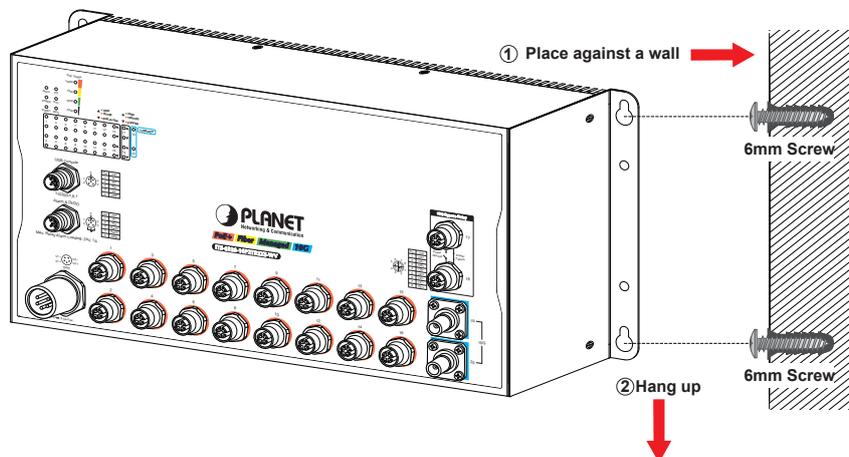
To hang the Industrial Managed Switch on the wall, simply follow the following steps:

Step 1: Four holes with an 8mm diameter are required in the wall. The distances between the four holes are shown below.

Step 2: Place four anchors inside the board hole by hammering them. Then screw the four screws leaving a space of 2mm apart as shown in the circled diagram below.



Step 3: The Industrial Managed Switch, shown in the picture below, can now be hung on the wall.



5.3 Grounding the Device

The device MUST come with grounding wire. Otherwise, a sudden lightning could cause fatal damage to the device.

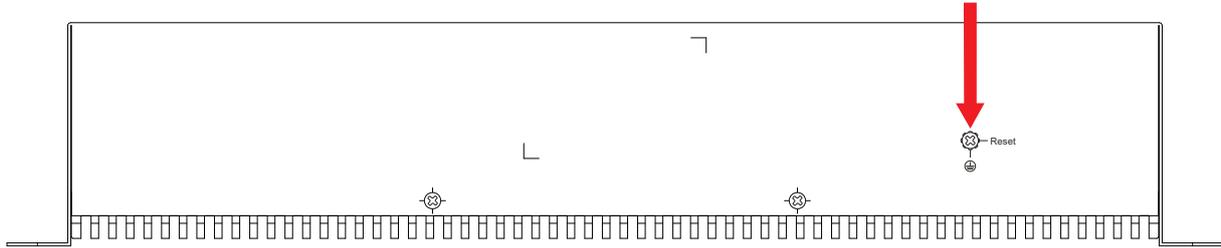


Figure 5-1: ITS-6326 Series Earth Grounding

6. 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** as shown in **Figure 6-1**.

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**.

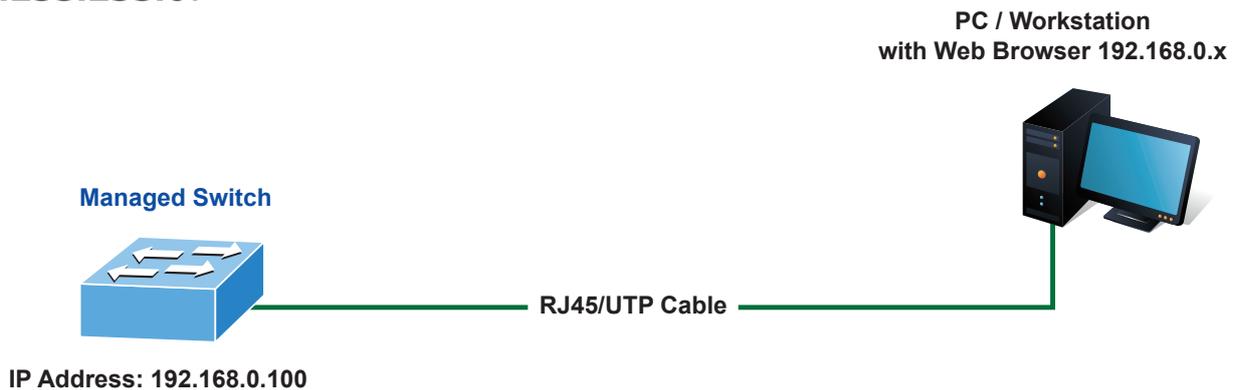


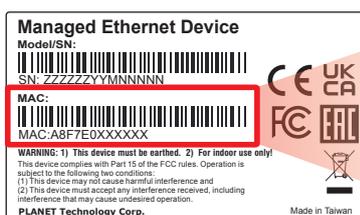
Figure 6-1: IP Management Diagram

6.1 Logging in to the Industrial Managed Switch

1. Use your preferred web browser such as Chrome, Edge, Firefox, etc. and enter IP address **<https://192.168.0.100>** (the factory default IP address) to access the Web interface.
2. When the following dialog box appears, please enter the default username and password. The factory default user name and password are shown as follows.

Default IP Address: **192.168.0.100**
Default Username: **admin**
Default Password: **sw + the last 6 characters of the MAC ID in lowercase**

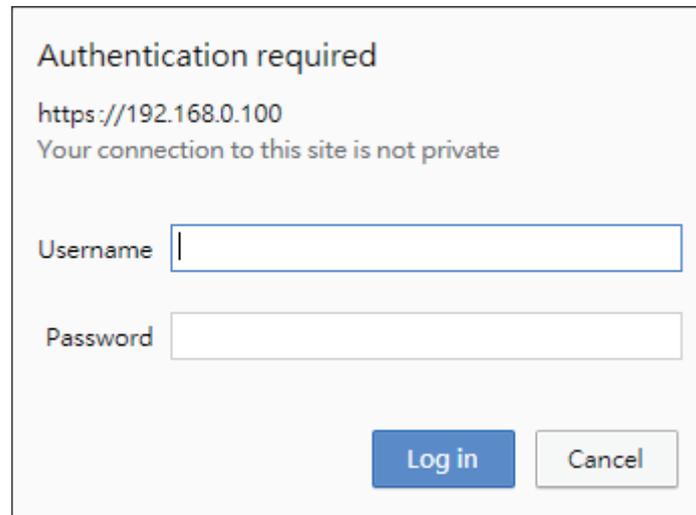
Find the MAC ID on your device label. The default password is "sw" followed by the last six lowercase characters of the MAC ID.



MAC ID: A8F7E0XXXXX
Default Password: swXXXXXX
("x" means the last 6 digits of the MAC address.
All characters should be in lowercase.)

Figure 6-2: MAC ID Label

The login screen in **Figure 6-3** appears.



The screenshot shows a web browser window with the title "Authentication required". Below the title, the URL "https://192.168.0.100" is displayed, followed by the message "Your connection to this site is not private". There are two input fields: "Username" and "Password". At the bottom, there are two buttons: "Log in" (in blue) and "Cancel" (in light gray).

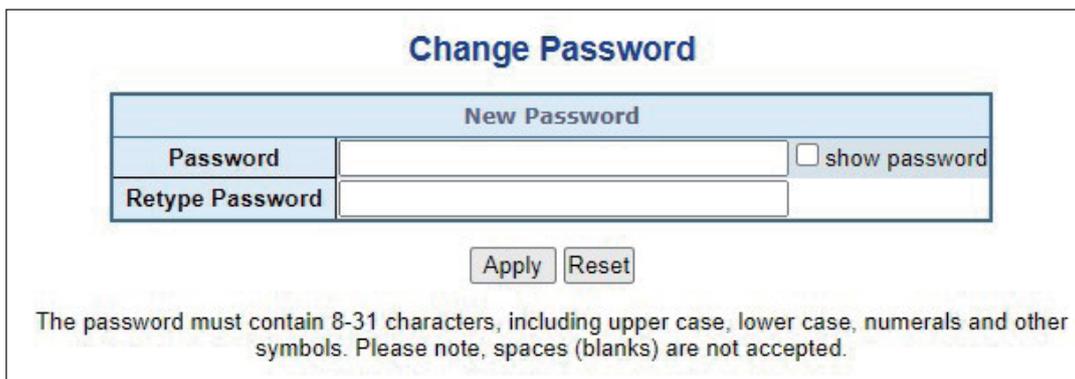
Figure 6-3: Login Screen



Note

If you have already changed the password via console or web login, please use this new password to log in.

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



The screenshot shows a "Change Password" screen. At the top, the title "Change Password" is centered. Below it is a form with a header "New Password". The form contains two rows: "Password" and "Retype Password". Each row has an input field. To the right of the "Password" input field is a checkbox labeled "show password". Below the form are two buttons: "Apply" and "Reset". At the bottom, there is a note: "The password must contain 8-31 characters, including upper case, lower case, numerals and other symbols. Please note, spaces (blanks) are not accepted."

Figure 6-4: Change Password Screen

4. Once the password change is complete, re-enter the web interface using your new password and the main screen appears as Figure 6-5 shows.



Figure 6-5: Web Main Screen of Industrial Managed Switch

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

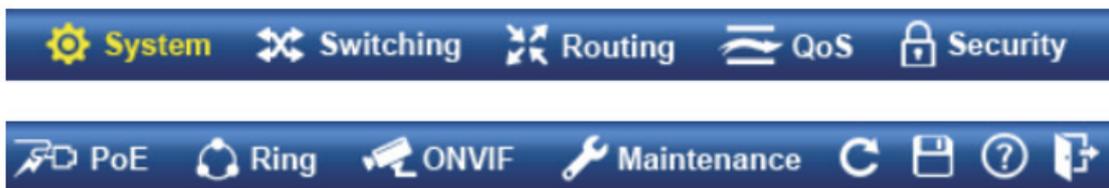


Figure 6-6: Switch Menu



Figure 6-7a: Switch Sub-menu



Figure 6-7b: 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.

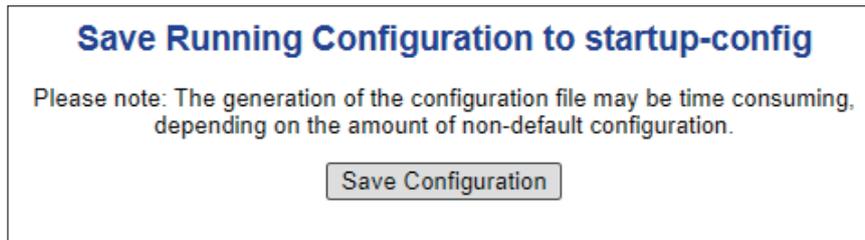
6.2 Saving Configuration via Web

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.

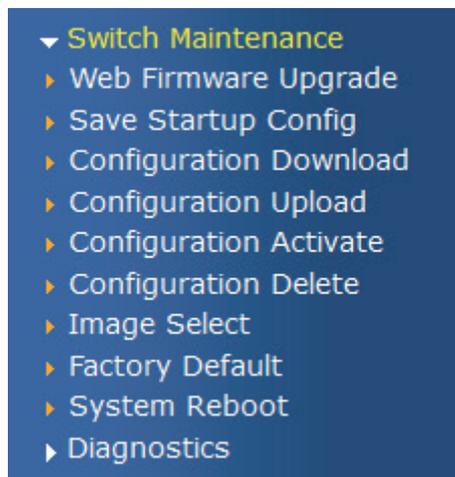
1. Click the Save icon on the top Switch Menu bar.



2. Press the **“Save Configuration”** button.



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



7. Terminal Setup

To configure the system, connect one end of a USB data cable to a **USB Port** on a PC or notebook computer and the other end to the **USB M12 console port** of the Industrial Managed Switch as shown in **Figure 7-1**.



Figure 7-1: Industrial Managed Switch Console Connectivity

A terminal program is required to make the software connection to the Industrial Managed Switch. Tera Term program 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
- ◆ Data bits: 8
- ◆ Parity: None
- ◆ Stop bits: 1
- ◆ Flow control: None

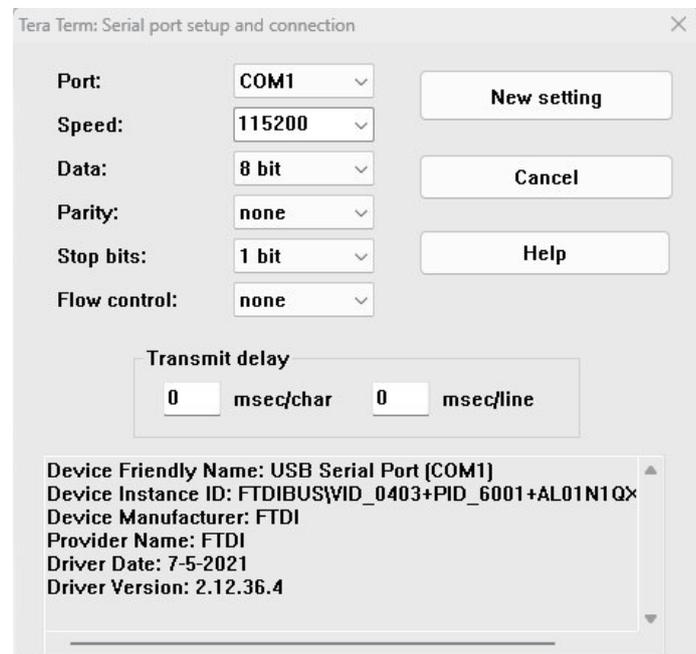


Figure 7-2: COM Port Configuration

7.1 Logging on to the Console

Once the terminal has been connected to the device, power on the Industrial Managed Switch and the terminal will display **“running testing procedures”**.



Note

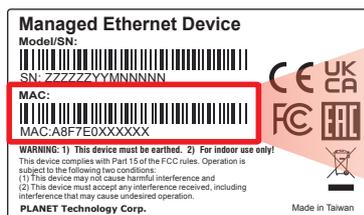
1. The following console screen is based on the ITS-6326-16P2T2XS-WV.
2. The display of the ITS-6326 series is the same as that of the ITS-6326-16P2T2XS-WV.

Then, the following message asks for the login user name and password. The factory default user name and password are shown as follows.

Username: **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” 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 7-3: 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 CLI.

```
Username: admin
Password:

You are required to change and store a new password to be able to get into the
switch.
Please store your new password in a safe, retrievable place for safe keeping.
Once configured, also store a copy of your Config File in a safe, retrievable p
lace for safe keeping.
Password: The password must contain 8-31 characters, including upper case, lowe
r case, numerals, and other symbols. Please note, spaces (blanks) are not accept
ed.

(New)Password:
Verify (New)Password:
The password is set successfully.

Press ENTER to get started
```

Figure 7-4: Create a New Password and Login Again

You can now enter commands to manage the Switch. For a detailed description of the commands, please refer to the following chapters.



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.

7.2 Configuring IP Address via Console

Once the terminal has been connected to the device, power on the Industrial Managed Switch and the terminal will display “**running testing procedures**”.

The Industrial 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 Managed Switch, please use the procedures as follows:

■ Display of Current IP Address

1. At the “#” prompt, enter “**show ip interface brief**”.

```
ITS-6326-Series# show ip interface brief
```

2. The screen displays the current IP address shown in **Figure 4-5**.

```
ITS-6326-16P2T2XS-WV# show ip interface brief
Interface Address          Method Status
-----
VLAN 1      192.168.0.100/24    Manual UP
ITS-6326-16P2T2XS-WV#
```

Figure 7-5: IP Information Screen

■ Configuration of the IP address

3. At the “#” prompt, enter the following command and press **<Enter>** as shown in Figure 7-6.

```
ITS-6326-Series# configure terminal
ITS-6326-Series (config)# interface vlan 1
ITS-6326-Series (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 Switch.

IP Address: 192.168.1.100
Subnet Mask: 255.255.255.0

```
ITS-6326-16P2T2XS-WV#
ITS-6326-16P2T2XS-WV# configure terminal
ITS-6326-16P2T2XS-WV(config)# interface vlan 1
ITS-6326-16P2T2XS-WV(config-if-vlan)# ip address 192.168.1.100 255.255.255.0
ITS-6326-16P2T2XS-WV(config-if-vlan)#
```

Figure 7-6: Configuring IP Address Screen

4. Repeat the previous steps to check if the IP address has changed.

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

■ Storing Current Switch Configuration

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

```
ITS-6326-16P2T2XS-WV#  
ITS-6326-16P2T2XS-WV# copy running-config startup-config  
Building configuration...  
% Saving 4498 bytes to flash:startup-config  
ITS-6326-16P2T2XS-WV#
```

Figure 7-7: Saving Current Configuration Command Screen



Note

If you are not familiar with console command or the related parameter, enter “**help**” anytime in console to get the help description.

8. Recovering Back to Default Configuration



Note

The following recovery process is based on the ITS-6326-16P2T2XS-WV, and it applies to other models in the ITS-6326 series as well.

■ 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 restore the user password to its factory default (the default password is sw + the last 6 characters of the MAC ID in lowercase), remove the grounding screw and press the reset button located on the bottom of the case for approximately **10 seconds**. Once the device has rebooted, you can log in to the web interface management within the same subnet of 192.168.0.xx and **must** re-secure the grounding screw to ensure system safety.

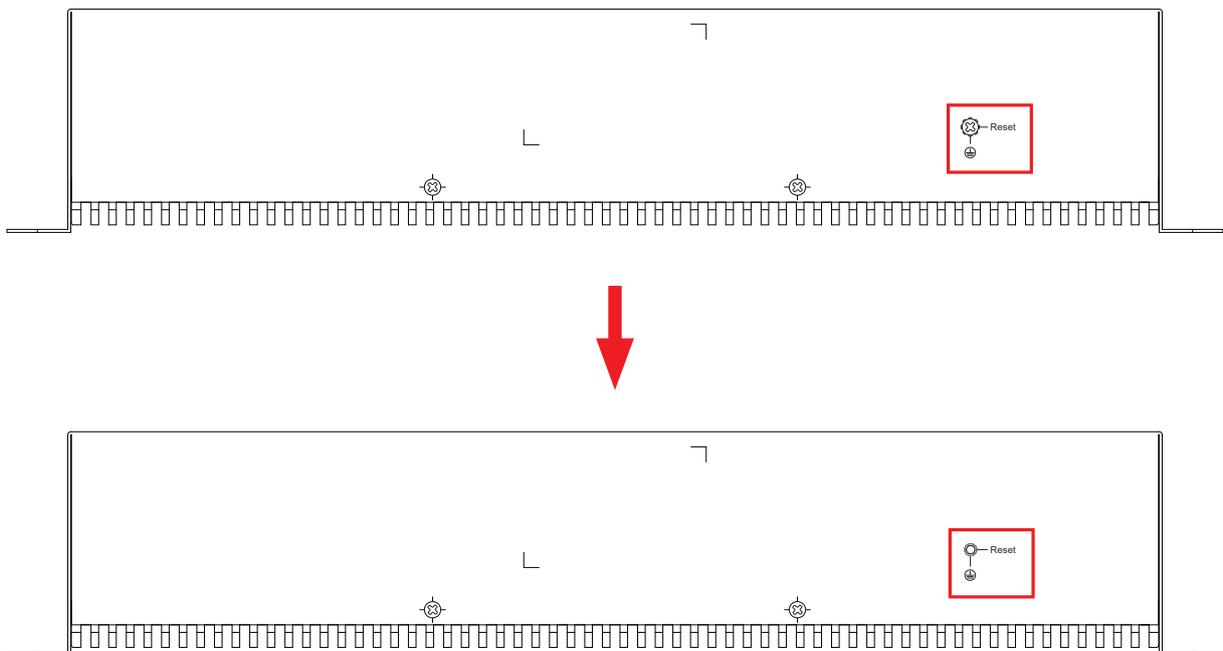


Figure 8-1: ITS-6326 Series Reset Button

9. 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 support team.

PLANET online FAQs:

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

Support team mail address:

support@planet.com.tw

ITS-6326 Series User's Manual

<https://www.planet.com.tw/en/support/downloads?&method=keyword&keyword=ITS-6326&view=3#list>



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

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