

Quick Start Guide

S2700&S3700&S5700&S6700 Series Switches

Issue: 17 (2014-11-20)

Part Number: 31504991

1 Packing List

- Chassis (with the product model on the nameplate)
- Power cable (Power cables are delivered with the switch if the switch is equipped with built-in power supply or pluggable power modules, and are delivered with power modules in other cases.)
- Installation accessory package:
 - Open Source Software Notice
 - Console cable
 - **Quick Start Guide**
 - Floating nuts
 - Rubber pads
 - Chassis ground cable
 - Warranty Card
 - Mounting brackets
 - Screws
 - Dust plugs



NOTE

- The numbers and types of items in the installation accessory package differ for different product models.
- Some switches have dust plugs delivered with them. Keep the dust plugs properly and use them to protect idle optical ports.

2 Safety Guidelines

- To ensure personal and equipment safety, observe all the safety precautions on the equipment and in this document.  and  items do not cover all the safety precautions and are only supplementary to the safety precautions.
- Follow all the safety precautions and instructions provided by Huawei. The safety precautions outlined in this document are only requirements of Huawei and do not include general safety requirements. Huawei is not liable for any consequence that results from violation of regulations pertaining to safe operations or safety codes pertaining to design, production, and equipment use.



WARNING

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.



CAUTION

- Take ESD protection measures during equipment installation and maintenance. For example, wear ESD gloves or an ESD wrist strap.
- During equipment transport and installation, prevent the equipment from colliding with objects like doors, walls, or shelves.
- Do not touch unpainted metal surfaces of equipment components with wet or contaminated gloves.
- Do not place other objects on the chassis.



NOTE

- The installation, cable connection, and login methods for S series switches are similar. This document uses **S5700-24TP-SI-AC** as an example. For more information, see the **Hardware Installation and Maintenance Guide**.
- Figures in the document are for reference only and may be different from actual devices.

3 Site Environment

-  Do not place this product in an environment with flammable or explosive gases, or smoke.
-  The installation site must be free from leaking or dripping water, heavy dew, and humidity. If the relative humidity is high, use dehumidifiers or air conditioners with dehumidification features.
-  The installation site must be well ventilated. Ensure that air vents on the equipment are not blocked.
-  Do not install the equipment in a dusty environment.

 Leave at least 50 mm clearance at the rear and both sides of the chassis for heat dissipation.

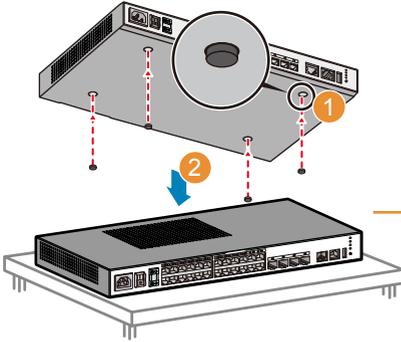
1U S series switches use forced, intelligent, or natural heat dissipation mode. If multiple switches are installed in a cabinet/rack, leave at least 1 U distance between each two switches (1 U = 44.45 mm). This distance is recommended for switches using forced or intelligent heat dissipation, and is required for switches using natural heat dissipation.

4 Installing the Chassis

Scenario 1: Desk Mounting

CAUTION

- S5710-HI and S6700 series switches cannot be desk mounted.
- Do not stack fanless switches on top of or closely next to each other.



- 1 Attach **four** rubber pads to the bottom.
- 2 Place the chassis on a desk.

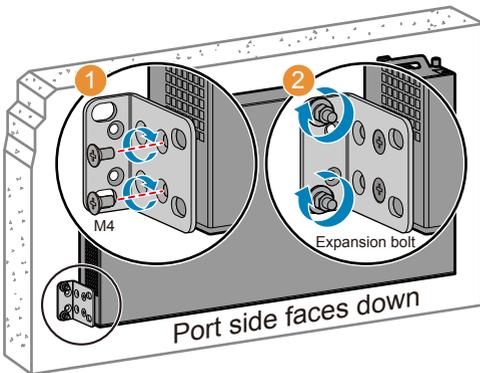
NOTE

Some switch models provide a security slot (🔒) near the panel on a side of the chassis. You can install a security lock (separately purchased) in this slot to protect the switch against theft.

Scenario 2: Wall Mounting

CAUTION

- Before drilling holes in a wall, make sure there are no power cables in the wall to avoid electric shock.
- The port-side panel must face down to protect the ports from water damage.
- Ensure that there are no flammable or explosive materials near the switch and no obstructions within 100 mm around the switch.
- S3700-HI, S5700-HI, and other 420 mm or deeper switches cannot be wall mounted.



- 1 Use **M4** screws to fix the mounting brackets on both sides close to the port side.
- 2 Use a hammer drill with $\phi 8$ drill bit to drill holes on the wall, and fix the switch on the wall with **expansion bolts**.

NOTE

When wall mounting 180/220 mm deep S2700 and S3700 switches, S5700-24TP-SI-AC/DC, and S5700-10P-LI-AC, fix each mounting bracket with two screws. For other models, fix each mounting bracket with three screws.

Scenario 3: Cabinet/Rack Mounting

Requirements for cabinet/rack

- S series Ethernet switches can be installed in a 19-inch standard cabinet/rack. Cabinets purchased from other vendors must have enough space for equipment installation.

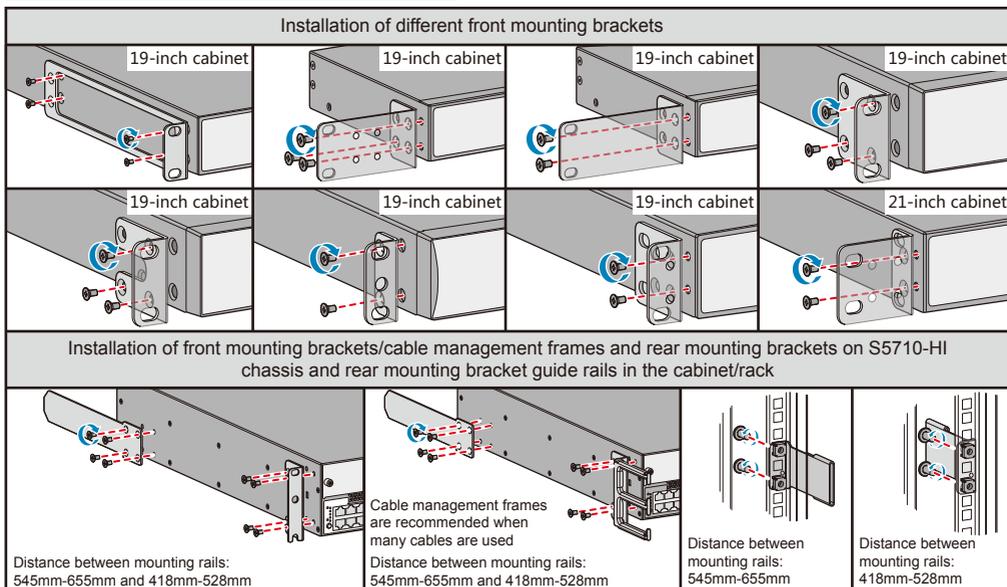
- When an S5710-EI, S5710-HI, S5720-HI, S5720-C-EI or S5720-PC-EI chassis uses Category-6 or higher network cables, the vertical distance between the port side and interior side of the cabinet door must be larger than or equal to 120 mm.
- When installing an S5710-EI, S5720-HI, S5720-C-EI or S5720-PC-EI chassis with front and rear mounting brackets, ensure that the distance between front and rear rails is within the range of 375 mm to 454 mm or 475 mm to 566 mm.
- When installing an S5710-HI chassis with front mounting brackets/cable management frames and rear mounting brackets, ensure that the distance between front and rear mounting brackets is within the range of 418 mm to 528 mm or 545 mm to 655 mm.
- If the distance between front and rear mounting rails is not within the required range, install guide rails or a tray in the cabinet/rack to support the chassis. Guide rails or trays are not delivered with the product and must be purchased separately.

Install the chassis onto the cabinet/rack

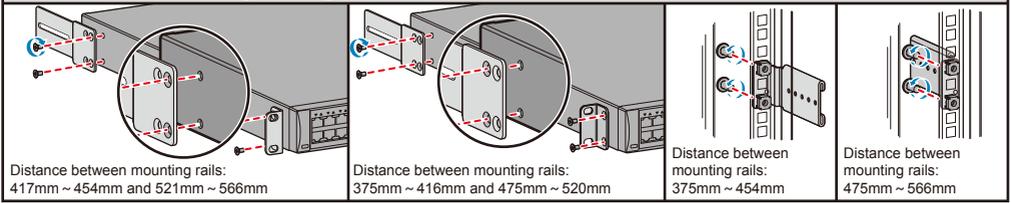
- When cabinet/rack mounting 180/220 mm deep S2700 and S3700 switches, S5700-24TP-SI-AC/DC, and S5700-10P-LI-AC, fix each mounting bracket with two screws. For other models, fix each mounting bracket with three screws.
- The S6700 chassis is heavy, so it is recommended that you install guide rails (separately purchased) in the cabinet to support the chassis.
- To install a 250 mm wide switch in a 19-inch cabinet, purchase long mounting brackets.
- Before installing mounting brackets to S5710-EI, S5710-HI, S5720-HI, S5720-C-EI and S5720-PC-EI switches, measure the distance between front and rear mounting rails in the cabinet and determine the installation method depending on the distance.

Secure mounting brackets to the chassis with **M4** screws. **The applicable mounting brackets and their installation methods differ on various product models. Use appropriate mounting brackets for each specific model.**

Installation of mounting brackets and guide rails



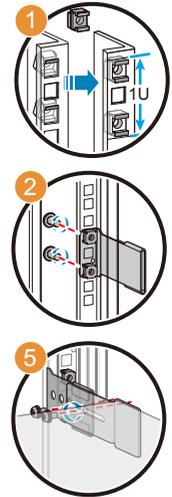
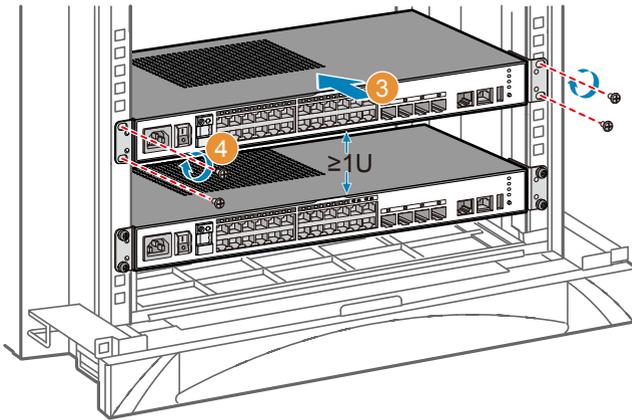
Installation of front and rear mounting brackets and rear mounting bracket guide rails for S5710-EI, S5720-HI, S5720-C-EI, and S5720-PC-EI



Install the chassis onto the cabinet/rack.

CAUTION

- When the ground point is on one side of the chassis, connect the ground cable before installing the chassis in the cabinet/rack. The ground cable cannot be connected when the chassis is already in the cabinet/rack.
- When more than one switch is installed in a cabinet/rack, leave at least 1 U distance between them.



1 Install four floating nuts on the front mounting rails, two on each side.

NOTE

- Observe the scale ticks on the mounting rails and leave a distance of 1 U between the two floating nuts on each mounting rail.
- For S5710-EI, S5720-HI, S5720-C-EI, and S5720-PC-EI chassis, install other two floating nuts on each rear mounting rail, with a 1 U distance between them. The lower floating nuts on the four mounting rails must be on the same horizontal.
- For an S5710-HI chassis, install two floating nuts on each front mounting rail, with a 2 U distance between them, and install two floating nuts on each rear mounting rails, with a 1 U distance between them. The lower floating nuts on the four mounting rails must be on the same horizontal plane.

2 (Optional, only for S5710-EI, S5710-HI, S5720-HI, S5720-C-EI and S5720-PC-EI) Install rear mounting bracket guide rails on the rear mounting rails. The guide rail installation method varies depending on the distance between front and rear mounting rails. The figure only shows an example. For details, see "Installation of mounting brackets and guide rails."

3 Hold bottom of the chassis and push the chassis into the cabinet.

NOTE

When installing an S5710-EI, S5710-HI, S5720-HI, S5720-C-EI and S5720-PC-EI align both rear mounting brackets with the guide rails, and then slowly slide the rear mounting brackets along the guide rails.

4 Use M6 screws to secure the chassis onto the cabinet/rack.

- 5 (Optional, only required for S5710-EI, S5720-HI, S5720-C-EI and S5720-PC-EI) Use M4x8 screws to secure the rear mounting brackets on the guide rails.



After completing the preceding steps, connect the ground cable to the ground point on the cabinet.

Scenario 4: Mounting in a Network Box

- Network cables used outdoors must be buried underground or routed through steel pipes to protect the switch from lightening. Do not route network cables overhead.
- Do not place a network box in an environment subject to intrusion of sulfur and water. Otherwise, the switch may be eroded or short circuited by water. Protect the switch from dust. If possible, install air filters on the outlets of the network box.
- To protect network ports from lightning, use 8-line surge protectors or Huawei certified 4-line surge protectors. When installing a network port surge protector, connect the IN ports to network devices and connect the OUT ports to network ports of the switch.
- Connect the ground cables of the switch and surge protectors to the ground bar in the network box. If the network box is located outdoors and power cables are routed aerially over a long distance (more than 300 m) to the network box, you are advised to install a power supply surge protector in the network box. The decoupled power cable must be at least 3 m long, and a ground cable must be no more than 40 cm long (recommended: < 15 cm).

5 Installing other Modules

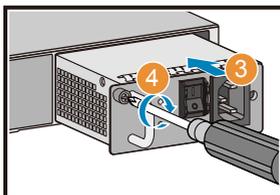
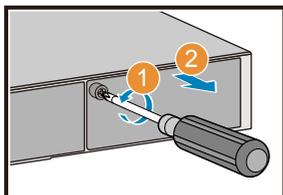
5.1 Installing a Power Module

Some models of the S2700&S3700&S5700&S6700 series switches support hot swappable power modules. Installation methods for different power modules are the same.



CAUTION

- When installing a power module, slowly push it into the slot. If you feel resistance or find the module inclined, pull the module out and push it into the slot again. Do not push the module with force; otherwise, the connectors on the module and backplane may be damaged.
- If only one power module is installed, install a power module filler panel in the empty power module slot.
- It is recommended that you install two power modules in a switch to enhance power reliability if the switch supports double power modules.
- Wear an ESD wrist strap or ESD gloves when you are installing a power module. When wearing an ESD wrist strap, ensure that the ESD wrist strap is grounded and in a close contact with your wrist.



- 1 Use a Phillips screwdriver to loosen the captive screw on the filler panel counterclockwise.
- 2 Pull the filler panel out by the captive screw. Keep the filler panel for future use.
- 3 Hold the handle on the power module with one hand and support the bottom with the other hand. Horizontally push the power module into the slot until it is completely in the slot.
- 4 Use the Phillips screwdriver to fasten the captive screw on the power module clockwise.

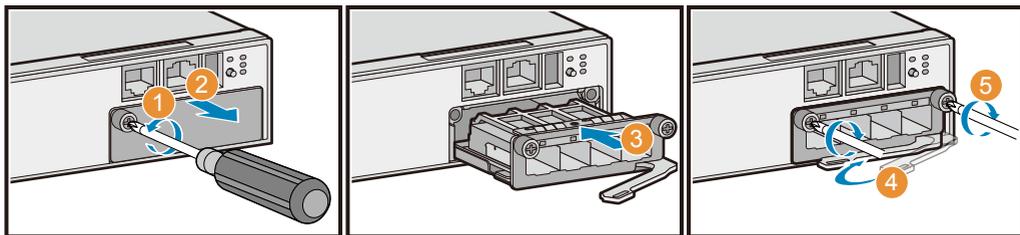
5.2 Installing a Card

Some models of the S3700&S5700 series switches support pluggable cards. Different pluggable cards are installed in the same way. A 4-port front card is used as an example here to describe the installation procedure.



CAUTION

- A card must be installed on switches that support the card. For the cards applicable to different switches, see "Cards" in the *Hardware Description*.
- Cards for the S3700-HI, S5700-HI, S5710-EI, S5710-HI, S5720-C-EI, S5720-PC-EI and S5720-HI are hot swappable, and cards for the other switch models are not hot swappable.
- Cards that do not support hot swappable cannot be installed when the switch is running. You must power off the switch, install the cards, and then power on the switch to activate the cards.
- When installing a card, slowly push it into the slot. If you feel resistance or find the card inclined, pull the card out and push it into the slot again. Do not push the card with force; otherwise, the connectors on the card and backplane may be damaged.
- Install filler panels in vacant slots.
- Wear an ESD wrist strap or ESD gloves when you are installing a card. When wearing an ESD wrist strap, ensure that the ESD wrist strap is grounded and in a close contact with your wrist.



- 1 Use a Phillips screwdriver to loosen the captive screw on the filler panel counterclockwise.
- 2 Pull the filler panel out by the captive screw. Keep the filler panel for future use.
- 3 Turn the eject lever of the card 45 degrees outward. Push the card into the chassis with your thumbs (below the captive screws), until the screw on the front panel is completely in the chassis.



NOTE

Front cards for the S3700-HI, S5700-HI, and S5710-HI have no screws, but the installation method is the same.

- 4 Rotate the ejector lever inward to lock the card after the screw is completely in the chassis.
- 5 Use the Phillips screwdriver to tighten the captive screws.

6 Connecting Cables



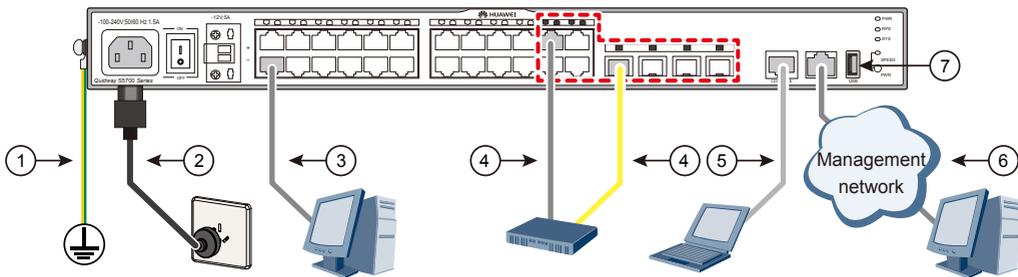
WARNING

- Laser beams will cause eye damage. Do not look into bores of optical modules or optical fibers without eye protection.
- Do not install power cables while the power is on.
- Do not turn on the power until you have finished installing the chassis and connecting cables.



CAUTION

- The PGND cable on the chassis must be grounded. The ground point on a network box, cabinet, or rack must be reliably grounded. If the ground point is covered by anti-rust coating, scrape off the paint around the ground point to ensure reliable grounding.
- Power cables must be more than 10 cm away from signal cables.
- The bend radius of optical fibers must be larger than 40 mm.



| No. | Item | Connect To | Remarks | No. | Item | Connect To | Remarks |
|-----|--|---|---|-----|---|-----------------------------------|---|
| 1 |  Ground cable | M4 lug: to the switch M6 lug: to the protection ground | M4 lug: the end with a smaller hole. M6 lug: the end with a larger hole. | | | | When the switch is powered on for the first time, connect the console port to a PC for onsite configuration. |
| 2 |  AC power cable | External power source | Use power cables compliant with local standards NOTE: Some models provide DC terminals and need to use DC power cables. Connect the positive cable to the positive terminal and negative cable to the negative terminal. | 5 |  Console cable | Operation terminal (usually a PC) | NOTE: Some models provide a mini USB port to connect to a console for onsite configuration. The mini USB port and console port cannot be used together. Select either of them according to your needs. When both the two ports are connected, only the mini USB port is active. |
| 3 |  Network cable | Network device like switch or PC | The port is an Ethernet electrical port, used for data transmission and receiving. | 6 |  Network cable | Operation terminal (usually a PC) | The port is the ETH management port, connected to a PC or network management station for onsite or remote configuration. |
| 4 |  Network cable | Upstream network device | The four GE optical ports are multiplexed with the last four GE electrical ports as combo ports. Optical fibers must be used with optical modules. | 7 |  USB port | USB flash drive | The USB port is used for device deployment and configuration/upgrade file transfer. |
| |  Optical fiber | | | | | | |

7 Logging In to the Switch for the First Time

7.1 Using the Web Management System for the First Login



- NOTE**
- The S2720 and S2750, S5700-LI, S5700S-LI, S5720-HI and S5720-EI (with a MODE button on the panel) of V200R007C00 and later versions support first login through the web management system.
 - To log in to other switch models for the first time, see 7.2 "Using the Console Port for the First Login."

- 1 Connect your computer to any Ethernet port of the switch using a network cable.
- 2 Hold down the MODE button for more than 6s. Then all the mode indicators are steady green, indicating that the switch is in the initial configuration mode. In this mode, the default IP address of the switch is set to 192.168.1.253/24, and the default level of the admin user is set to 15.



- NOTE**
- If you do not save the configuration within 10 minutes after the system enters the initial configuration mode, the system exits from the initial configuration mode and restores the factory settings.

- 3 Configure an IP address for the computer, which is in the same network segment as the default IP address of the switch.

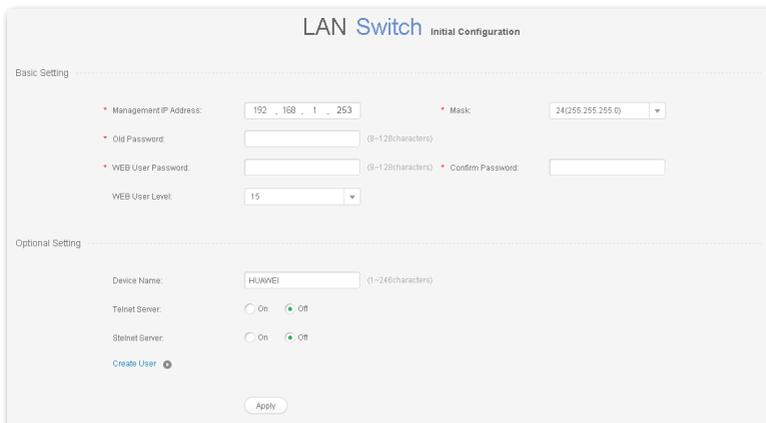
The method to change the IP address on your PC depends on the architecture and operating system of your PC. Search for "IP addressing" in the user manual or online help of your PC to find operation instructions.

- Start the web browser on the computer, enter **https://192.168.1.253** in the address box, and press **Enter** to display the initial login page. Enter the default user name **admin** and default password **admin@huawei.com** and select the language on the login page. Then click **GO** to display the web-based configuration page.



Use Microsoft Internet Explorer 8.0, Mozilla Firefox 12.0, Google Chrome 23.0, or later versions of these browsers. Earlier versions of browsers may cause abnormal display on the web pages.

- Configure the switch. The web-based configuration page provides basic and optional configuration items. The basic configuration enables you to log in to the switch using the web management system, and the optional configuration enables you to log in to the switch using Telnet or STelnet. Only parameters for the basic configuration are described below. For details about the optional configuration and more information about the product, see the **Configuration Guide** of the product.



| Configuration Item | Description |
|-----------------------|---|
| Management IP Address | Mandatory. Enter the management IP address of the switch, in dotted decimal notation. |
| Mask | Mandatory. Select a subnet mask from the drop-down list box. |
| Old Password | Mandatory. Enter the old password for the default web user. |
| WEB User Password | Mandatory. Enter a new password for the default web user. To ensure password strength, the password must contain at least two types of the following: lowercase letters, uppercase letters, digits, and special characters (such as ! \$ # %), and cannot contain any space or single quotation mark. |
| Confirm Password | Mandatory. Enter the new password again. |
| WEB User Level | Optional. Select a user level from the drop-down list box. The user of level 3 or higher has management rights. |

- 6 After completing configuration on the page, click Apply to save the configuration. When you exit from the initial login page, either of the following situations will occur depending on the management IP address you configured:
 - If the management IP address is in the same network segment as 192.168.1.253/24, the system jumps to the web login page directly.
 - If the management IP address is not in the same network segment as 192.168.1.253/24, you cannot log in to the switch again using the web management system. You need to configure another IP address for your computer to make the computer and switch reachable from each other.

Now, you can log in to the switch using the web management system, Telnet, or STelnet to maintain the switch.

7.2 Using the Console Port for the First Login



NOTE

- The S5700LI, S5700S-LI, S5710-EI, S5720-EI and S5720-HI series switches also support login through the Mini USB port. For details about this login method, see the *Configuration Guide* of the product. This document describes how to log in to the switch through the console port.
- In the S5720-EI series, the S5720-50X-EI-AC and S5720-50X-EI-46S-AC models do not have a Mini USB port.

- 1 Use a console cable to connect the switch to a PC.



NOTE

If your PC's operating system provides terminal simulation software (like HyperTerminal in Windows 2000/XP), you do not need to install additional terminal simulation software. If the PC runs on an operating system without terminal simulation software (like Windows 7), install third-party terminal simulation software on the PC by referring to user manual or online help.

- 2 Start the terminal simulation software, create a connection, select a serial port, and set communication parameters in consistent with the default configuration of the switch's console port, as listed below:

- **Transmission rate: 9600**
- **Data bit (B): 8**
- **Parity bit: None**
- **Stop bit (S): 1**
- **Flow control mode: None**

- 3 Press **Enter** in subsequent steps until the following information is displayed on the terminal simulation software, and then enter a password.

```
Please configure the login password (6-16)
Enter Password:
Confirm Password:
```



NOTE

The display information may differ on different product models.



CAUTION

- After a login password is configured, this password will be required upon next login if password authentication is used on this user interface.
- If you forget the login password, see the *Troubleshooting* to restore the password.

After successful login, you can configure the switch on the command line interface. For more information, see the *Configuration Guide*. To configure the switch using the web-based management system, perform the following steps.

- 4 Connect your PC to the ETH port of the switch using a network cable and go to 5. If the switch has no ETH port, connect the PC to any Ethernet port on the switch and go to 6.

- 5 Configure a management IP address for the switch.

```
<HUAWEI> system-view
Enter system view, return user view with Ctrl+Z.
[HUAWEI] interface meth 0/0/1
[HUAWEI-Meth0/0/1] ip address 192.168.1.254 24
[HUAWEI-Meth0/0/1] quit
```

The management IP address of the switch is set to 192.168.1.254. Go to 7.

- 6 Create a VLANIF interface and assign the management IP address to the VLANIF interface. Here, VLAN 9 and GE0/0/48 are used as an example. (GE0/0/48 is the physical port connected to the PC.)

```
<HUAWEI> system-view
Enter system view, return user view with Ctrl+Z.
[HUAWEI] vlan 9
[HUAWEI-vlan9] quit
[HUAWEI] interface vlanif 9
[HUAWEI-Vlanif9] ip address 192.168.1.254 24
[HUAWEI-Vlanif9] quit
[HUAWEI] interface gigabitethernet 0/0/48
[HUAWEI-GigabitEthernet0/0/48] port link-type access
[HUAWEI-GigabitEthernet0/0/48] port default vlan 9
[HUAWEI-GigabitEthernet0/0/48] quit
```



NOTE

The S2750, S5700S-LI, and S5700LI of versions earlier than V200R005C00 support only one VLANIF interface and have a predefined interface VLANIF1. To use another VLANIF interface on these switches, delete VLANIF1, and then create the new VLANIF interface.

- 7 Configure a local user.

```
[HUAWEI] aaa
[HUAWEI-aaa] local-user admin password cipher admin@huawei
[HUAWEI-aaa] local-user admin privilege level 15
[HUAWEI-aaa] local-user admin service-type http ftp
[HUAWEI-aaa] local-user admin ftp-directory flash:
[HUAWEI-aaa] quit
[HUAWEI] quit
<HUAWEI> save
```

- 8 Assign an IP address to the PC. Select an idle IP address in the range of 192.168.1.2 to 192.168.1.253.



NOTE The method to change the IP address on your PC depends on the architecture and operating system of your PC. Search for "IP addressing" in the user manual or online help of your PC to find operation instructions.

- 9 Start the web browser, enter **https://192.168.1.254** (switch IP address) in the address box, and press **Enter**. The login page is displayed.

- 10 Enter the default user account information.

User name: **admin**

Default password: **admin@huawei** (case sensitive)

Now, you can configure the switch using the web system. For more information, see the *Web System Guide*. If the login page cannot be displayed, the switch may have not loaded the web page file. Perform the following steps to upload and load the web page file to the switch.

- 11 Log in to <http://support.huawei.com/enterprise>. Select the specific product model and version to download the corresponding software package. The software package contains the web page file named **product name-software version.web system version.web.7z**.

- 12 Upload the web page file obtained from the website. In the following example, the web page file is named **switch.web.7z**.

```
<HUAWEI> system-view  
[HUAWEI] ftp server enable
```

Choose **Start > Run** on the PC, and enter **cmd** in the **Run** text box to display the command line window. Set up an FTP connection between the PC (FTP client) and the switch, enter the user name **admin** and password **admin@huawei**, and run the **put** command to upload the web page file to the switch.



NOTE The configuration on the PC varies depending on the system architecture and operating system used on your PC. The Microsoft Windows 7 operating system is used as an example here.

```
C:\Documents and Setting\Administrator> ftp 192.168.1.254  
Connected to 192.168.1.254.  
220 FTP service ready.  
User (192.168.1.254:(none)): admin  
331 Password required for admin.  
Password:  
230 User logged in.  
ftp> put switch.web.7z
```

- 13 Load the web page file.

```
[HUAWEI] http server load switch.web.7z  
[HUAWEI] quit  
<HUAWEI> save
```

The web page file has been loaded. Now you can perform steps 9 and 10 to log in to the web system and configure the switch on web pages.

8 Obtaining Product Documentation and Technical Support

You can obtain the latest product documentation at <http://support.huawei.com/enterprise>. Log in to the website, and select a specific product model and version to download its documentation.

If the instructions contained in the product documentation are insufficient to resolve problems that occur during device operation or maintenance, contact Huawei Technical Assistance Center for technical support.

■ Enterprise network technical bulletin : <http://support.huawei.com/ecommunity>



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