FS

S5860 Series Switches

MANAGED L3 ENTERPRISE SWITCHES

Quick Start Guide V1.0

Introduction

Thank you for choosing S5860 Series Switches. This guide is designed to familiarize you with the layout of the switch and describes how to deploy the switch in your network.
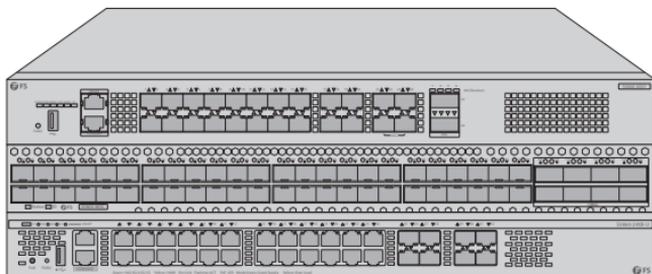
S5860-20SQ

S5860-48SC

S5860-24XB-U

Accessories

S5860-20SQ/S5860-24XB-U

Power Cord x2

Grounding Cable x1

Rubber Pad x4

Mounting Bracket x2

M4 Screw x8

S5860-48SC

Power Cord x2

Grounding Cable x1
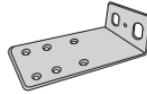
Mounting Bracket x2

M4 Screw x14

M6 Screw x8

M6 Nut x8
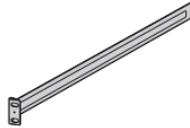
Slide Rail x2

Inner Rail x2

NOTE: S5860 series switches have dust plugs delivered with them. Keep the dust plugs properly and use them to protect idle optical ports.

Hardware Overview

Front/Back Panel Ports

S5860-20SQ

MGMT   SFP+   SFP28

USB CONSOLE   QSFP+

S5860-48SC

SFP+   QSFP28

MGMT

CONSOLE   USB

S5860-24XB-U

MGMT

USB   CONSOLE   RJ45   SFP+   SFP28
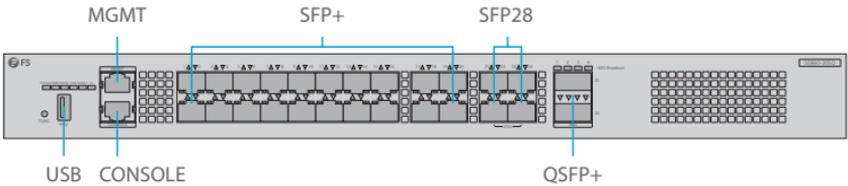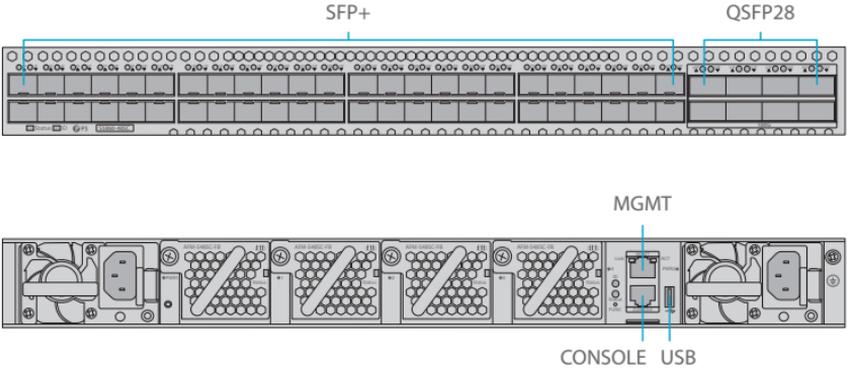
Ports	Description
RJ45	100M/1/2.5/5/10G ports for Ethernet connection
SFP+	SFP+ ports for 1/10G connection
SFP28	SFP28 ports for 10/25G connection
QSFP+	QSFP+ ports for 40G or 4x 10G connection
QSFP28	QSFP28 ports for 40/100G connection
MGMT	An out-of-band Ethernet management port
CONSOLE	An RJ45 console port for serial management
USB	A USB management port for software and configuration backup and offline software upgrade

Front/Back Panel Buttons

S5860-20SQ
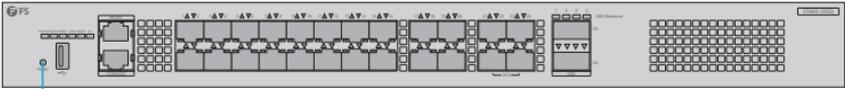
FUNC

S5860-48SC
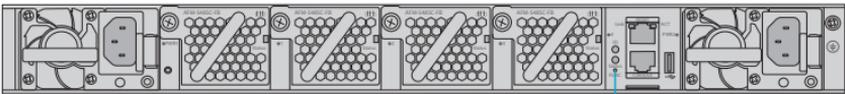
FUNC

S5860-24XB-U
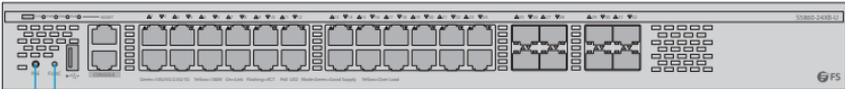
PoE FUNC

Buttons	Description
FUNC	The switch will restart after you press the FUNC button for more than five seconds and wait for another ten seconds.
PoE	Switch the display mode between PoE mode and switch mode.

NOTE: The FUNC button of the S5860-48SC is reserved.

Back Panel

S5860-20SQ
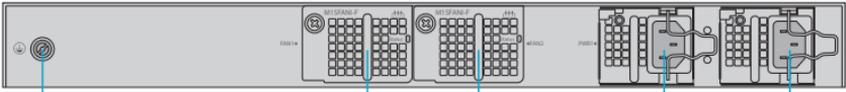
Grounding Point   Fan Slots   Dual Power Supplies

S5860-48SC
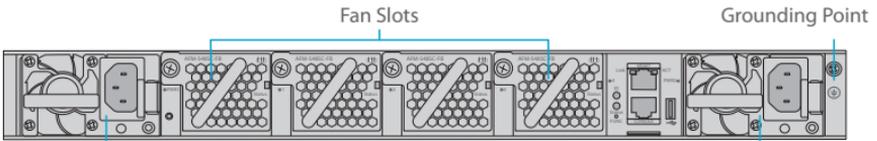
Fan Slots   Grounding Point

Dual Power Supplies

S5860-24XB-U
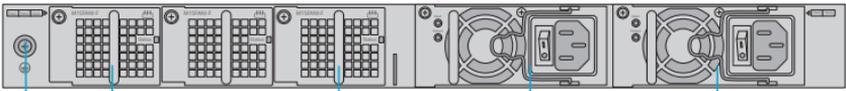
Grounding Point   Fan Slots   Dual Power Supplies

Front/Back Panel LEDs

S5860-20SQ

STATUS/PWR1/PWR2
FAN/MGMT/ID   SFP+   SFP28   QSFP+
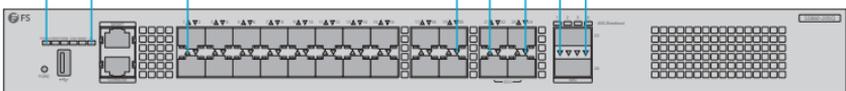
LEDs	Status	Description
STATUS	Off	The system is powered off.
	Solid Red	1. A system fault occurs. 2. The temperature reaches the upper limit.
	Blinking Green	Initialization is in progress.

LEDs	Status	Description
STATUS	Solid Green	The system works properly.
	Solid Yellow	The temperature reaches the threshold value.
PWR1/PWR2	Off	The power module is NOT in the position.
	Solid Green	The power module works properly.
	Solid Red	A power fault occurs.
FAN	Solid Green	The fan works properly.
	Solid Red	1. A fan fault occurs. 2. The fan model does not match with the system. 3. Not all fans are in position.
MGMT	Off	The MGMT port is NOT connected.
	Green	The MGMT port is connected.
	Blinking Green	The MGMT port is transmitting or receiving data.
ID	Off	The locator is controlled by CPLD by default.
	Solid Blue	The locator is controlled by O&M personnel remotely.
SFP+	Off	The SFP+ port is NOT connected.
	Solid Green	The SFP+ port is connected at 1/10G.
	Blinking Green	The SFP+ port is transmitting or receiving data at 1/10G.
SFP28	Off	The SFP28 port is NOT connected.
	Solid Green	The SFP28 port is connected at 10/25G.
	Blinking Green	The SFP28 port is transmitting or receiving data at 10/25G.
QSFP+	Off	The QSFP+ port is NOT connected.
	Solid Green	The QSFP+ port is connected at 10/40G.
	Blinking Green	The QSFP+ port is transmitting or receiving data at 10/40G.

S5860-48SC

SFP+   QSFP28

STATUS ID

ID MGMT

STATUS

LEDs	Status	Description
STATUS	Off	The system is powered off.
	Solid Red	1. One of the modules of the system fails. 2. There are less than 3 fans. 3. The internal or partial temperature exceeds the temperature limit, and the switching service resets.
	Blinking Green	Initialization is in progress.
	Solid Green	The system works properly.
	Solid Yellow	1. The temperature reaches the warning threshold. 2. Only 3 fans are in the position. 3. One of the dual powers is not connected with the AC power cord.
MGMT	Off	The MGMT port is NOT connected.
	Green	The MGMT port is connected at 10/100/1000 Mbps.
	Blinking Yellow	The MGMT port is transmitting or receiving data.
ID	Off	The locator is controlled by CPLD by default.
	Solid Blue	The locator is controlled by O&M personnel remotely.

LEDs	Status	Description
SFP+	Off	The SFP+ port is NOT connected.
	Solid Green	The SFP+ port is connected at 1/10G.
	Blinking Green	The SFP+ port is transmitting or receiving data at 1/10G.
QSFP28	Off	The QSFP28 port is NOT connected.
	Solid Green	The QSFP28 port is connected at 40/100G.
	Blinking Green	The QSFP28 port is transmitting or receiving data at 40/100G.

S5860-24XB-U
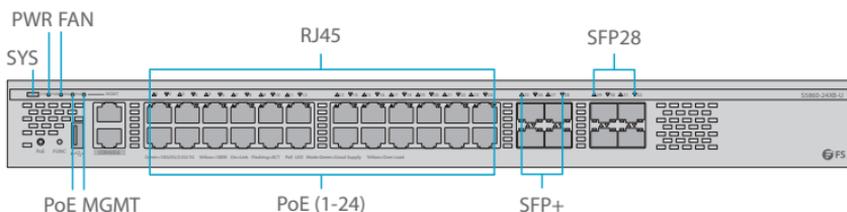
LEDs	Status	Description
SYS	Off	The system is powered off.
	Solid Red	1. A system fault occurs. 2. The temperature reaches the upper limit.
	Blinking Green	Initialization is in progress.
	Solid Green	The system works properly.
	Solid Yellow	1. The temperature reaches the threshold value. 2. Different power modules are used together.
	Solid Blue	The locator takes effect. It is controlled by O&M personnel remotely.

LEDs	Status	Description
PWR	Off	The power module is NOT in the position.
	Solid Green	The power module works properly.
	Solid Red	1. A power fault occurs. 2. No AC power cable is plugged in. 3. The power model does not match.
FAN	Solid Green	The fan works properly.
	Solid Red	1. A fan fault occurs. 2. The fan model does not match with the system. 3. Not all fans are in position.
PoE	Solid Green	Indicates the switching state.
	Solid Yellow	Indicates the PoE state.
MGMT	Off	The MGMT port is NOT connected.
	Solid Green	The MGMT port is connected at 1000 Mbps.
	Blinking Green	The MGMT port is transmitting or receiving data at 1000 Mbps.
	Solid Yellow	The MGMT port is connected at 10/100 Mbps.
	Blinking Yellow	The MGMT port is transmitting or receiving data at 10/100 Mbps.
RJ45	Off	The RJ45 port is NOT connected.
	Solid Green	The RJ45 port is connected at 1/2.5/5/10G.
	Blinking Green	The RJ45 port is transmitting or receiving data at 1/2.5/5/10G.
	Yellow	The RJ45 port is connected at 100 Mbps.
	Blinking Yellow	The RJ45 port is transmitting or receiving data at 100 Mbps.
PoE (1-24)	Off	PoE is off.
	Solid Green	PoE works properly.
	Solid Yellow	A PoE fault or overload occurs.

LEDs	Status	Description
SFP+	Off	The SFP+ port is NOT connected.
	Solid Green	The SFP+ port is connected at 1/10G.
	Blinking Green	The SFP+ port is transmitting or receiving data at 1/10G.
SFP28	Off	The SFP28 port is NOT connected.
	Solid Green	The SFP28 port is connected at 10/25G.
	Blinking Green	The SFP28 port is transmitting or receiving data at 10/25G.

Installation Requirements

Before you begin the installation, make sure that you have the followings:

- Phillips screwdriver.

- Standard-sized, 19" wide rack with a minimum of 1U height available.

- Category 5e or higher RJ-45 Ethernet cables, fiber optical cables and console cable for connecting network devices.

Site Environment :

- Do not operate it in an area that exceeds an ambient temperature of 50℃.

- The installation site must be well ventilated. Ensure that there is adequate airflow around the switch.

- The switch should be installed at least 1U (44.45mm) away from devices to its sides.

- Be sure that the switch is level and stable to avoid any hazardous conditions.

- Do not install the equipment in a dusty environment.

- The installation site must be free from leaking or dripping water, heavy dew, and humidity.

- Ensure rack and working platforms are well earthed.

Mounting the Switch

Desk Mounting
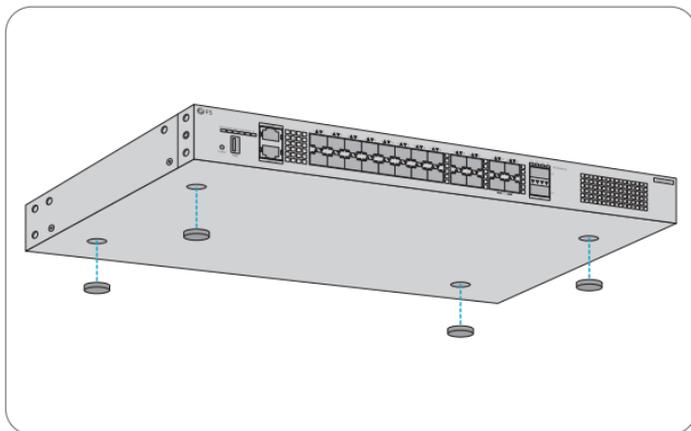
1. Attach four rubber pads to the bottom.
2. Place the chassis on a desk.

Rack Mounting
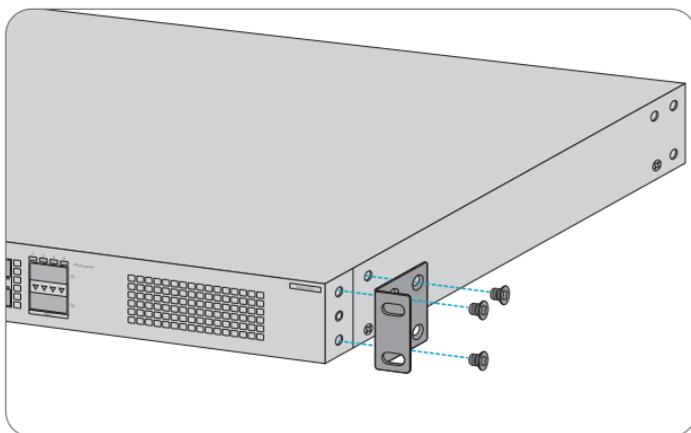
1. Secure the mounting brackets to the two sides of the switch with supplied M4 screws.
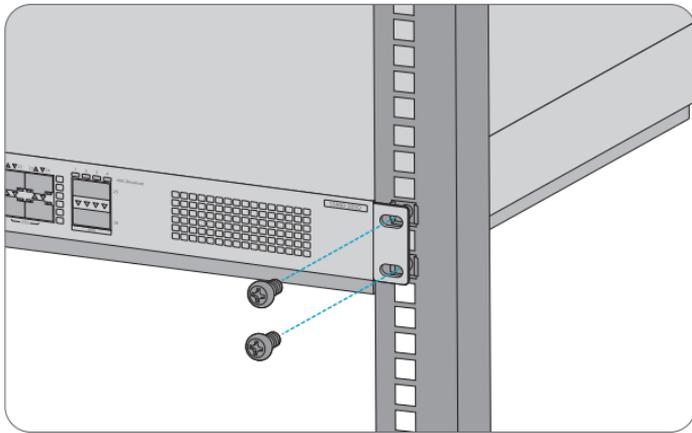
2. Attach the switch to the rack using four M6 screws and cage nuts.

Installing the Power Supply Module
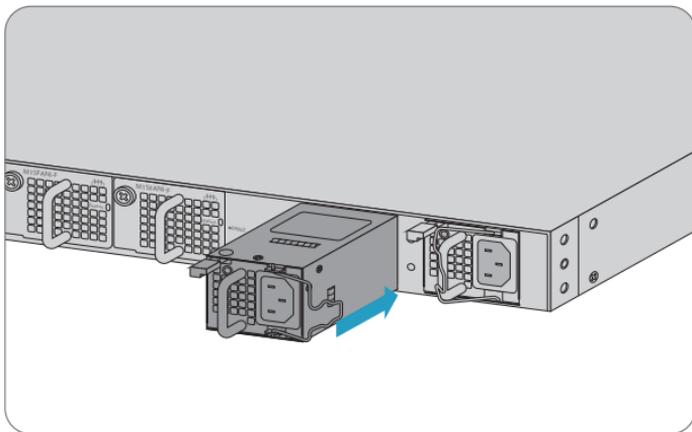
1. Take a new power module out of the package and confirm the input mode and the input parameters of the power module match the requirements.

2. Remove the old power module and take the plane printed with power information as the top panel of the power module. Hold the handle of the power module with one hand, and hold the end of the power module with the other hand. Insert it into the chassis along the guide rail uprightly and slowly until it clicks into place, and make sure that it is in good contact with the power slot.

> **NOTE:** Insert the power module steadily. Please pay attention to the direction of the power panel to avoid wrong insertion. If the position is not proper, press the plug of the power module and hold on to the module handle with one hand to pull it out slowly, then re-insert it.

Grounding the Switch
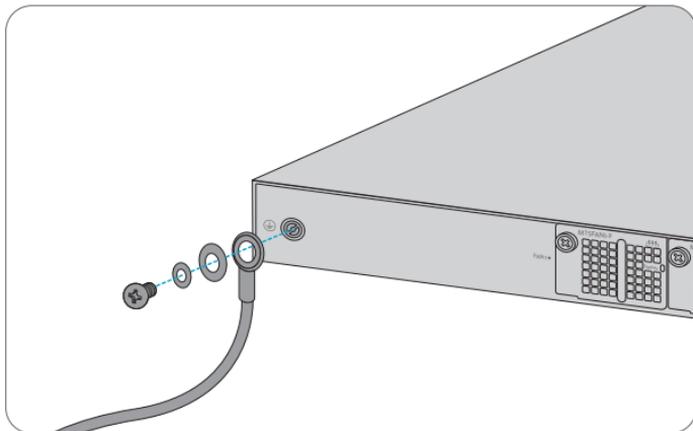
1. Connect one end of the grounding cable to a proper earth ground, such as the rack in which the switch is mounted.

2. Secure the grounding lug to the grounding point on the switch back panel with the washers and screws.

> **CAUTION:** The earth connection must not be removed unless all supply connections have been disconnected.

Connecting the Power
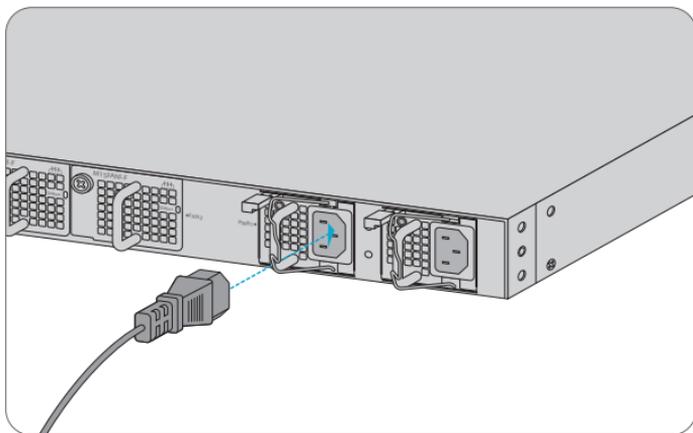
1. Plug the AC power cord into the power port on the back of the switch.

2. Connect the other end of the power cord to an AC power source.

> **WARNING:** Do not install power cable while the power is on.

Connecting the RJ45 Ports
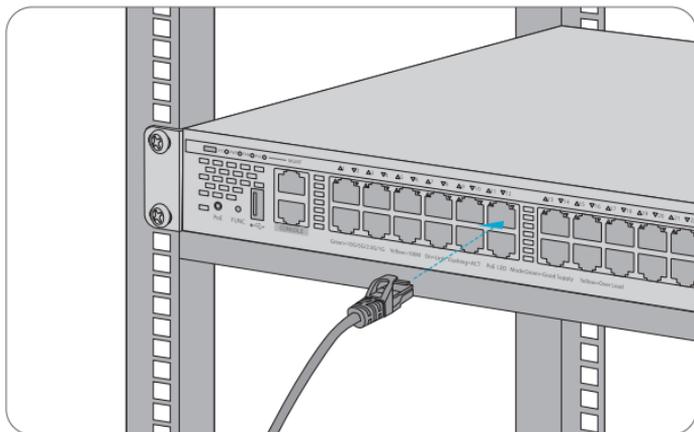
1. Connect an Ethernet cable to the RJ45 port of IP cameras, IP telephone, Access Points (AP), or other network devices.

2. Connect the other end of the Ethernet cable to the RJ45 port of the switch.

Connecting the SFP/SFP+ Ports
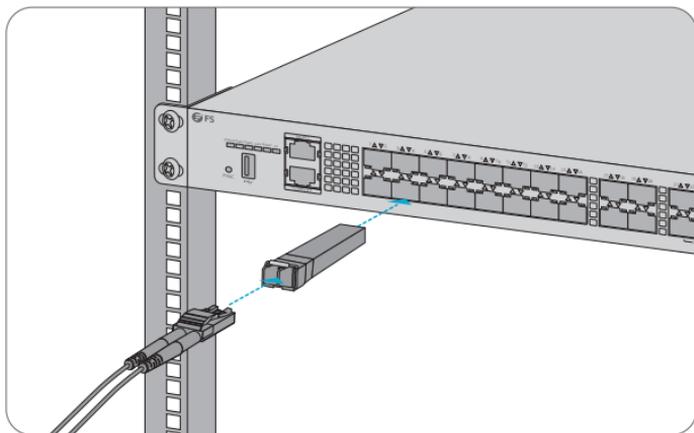
1. Plug the compatible SFP/SFP+ transceiver into the SFP/SFP+ port.

2. Connect a fiber optic cable to the fiber transceiver. Then connect the other end of the cable to another fiber device.

Connecting the SFP28 Ports
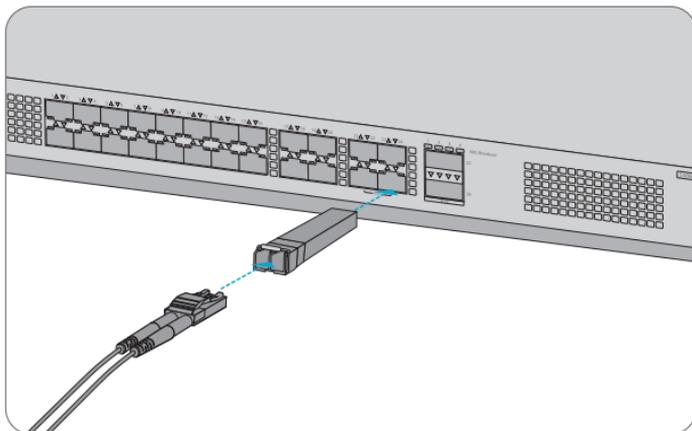
1. Plug the compatible SFP28 transceiver into the SFP28 port.

2. Connect a fiber optic cable to the fiber transceivers. Then connect the other end of the cable to another fiber device.

Connecting the QSFP+ Ports
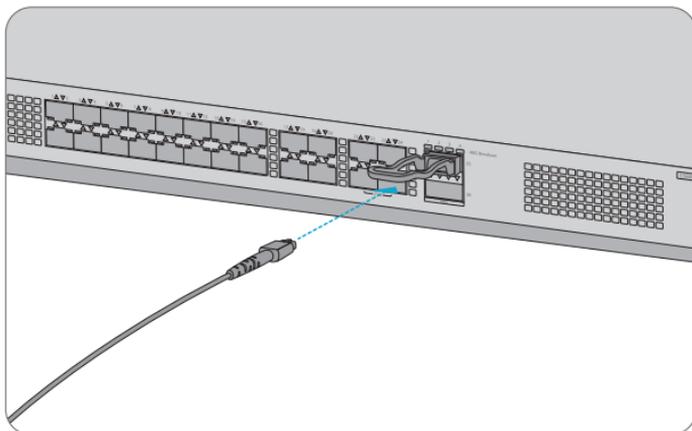
1. Plug the compatible QSFP+ transceiver into the QSFP+ port.

2. Connect a fiber optic cable to the fiber transceivers. Then connect the other end of the cable to another fiber device.

Connecting the QSFP28 Ports
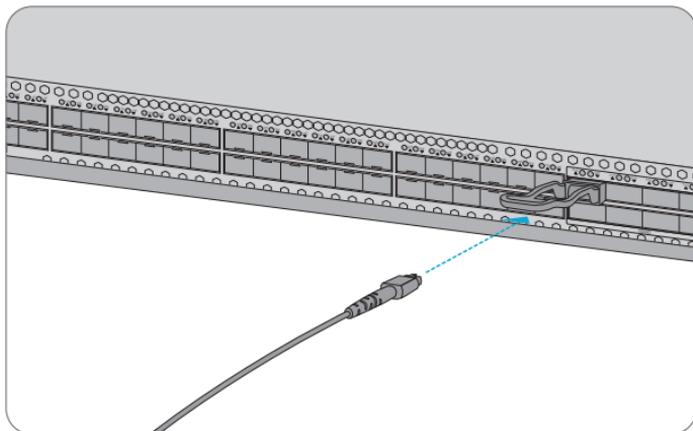
1. Plug the compatible QSFP28 transceiver into the QSFP28 port.

2. Connect a fiber optic cable to the fiber transceivers. Then connect the other end of the cable to another fiber device.

⚠ **WARNING:** Laser beams will cause eye damage. Do not look into bores of optical modules or optical fibers without eye protection.

Connecting the Console Port
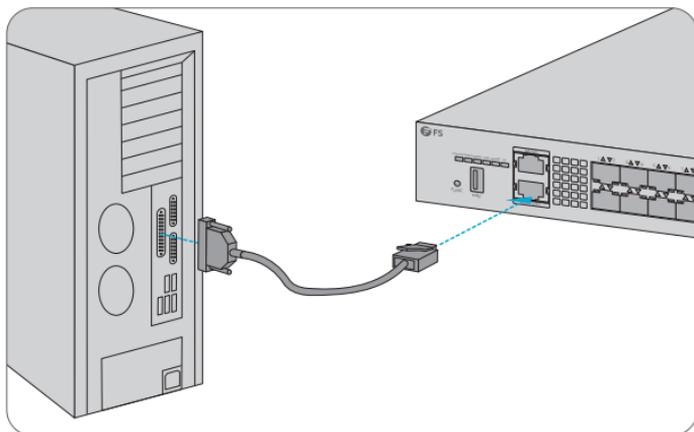
1. Insert the RJ45 connector into the RJ45 console port on the switch.

2. Connect the DB9 female connector of the console cable to the serial port on the computer.

Connecting the MGMT Port
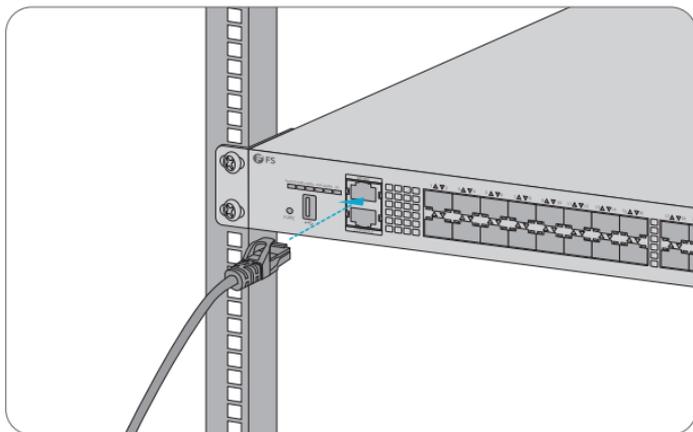
1. Connect one end of a standard RJ45 Ethernet cable to a computer.

2. Connect the other end of the cable to the MGMT port on the switch.

Stacking the Switches
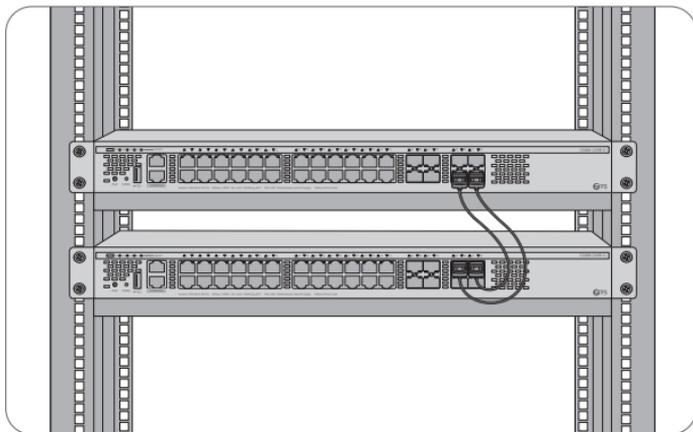
The S5860 series switches support stacking up to 2 switches between the same models together. The switch can be physically stacked using optical fiber cables connected to SFP+/SFP28 transceivers or 10/25G Direct Attach Cables (DAC). Any two SFP+/SFP28 ports on the switch can be used for physical stacking. The copper ports can also be used for physical stacking.

> **NOTE:** S5860-20SQ/S5860-24XB-U switches support stacking with each other.

Configuring the Switch

Configuring the Switch Using the Web-based Interface

Step 1: Connect the computer to the Management port of the switch using the network cable.

Step 2: Set the IP address of the computer to **192.168.1.x**. ("x" is any number from 2 to 254.)
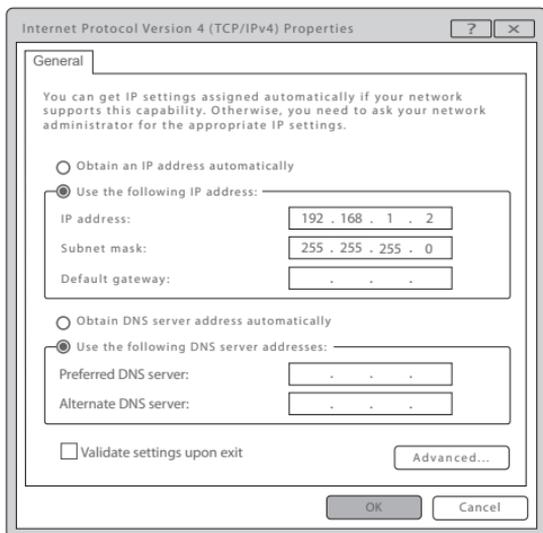
Step 3: Open a browser, type **http://192.168.1.1**, and enter the default username and password, **admin/admin**.

Step 4: Click **Login** to display the web-based configuration page.

Configuring the Switch Using the Console Port

Step 1: Connect a computer to the switch's console port using the console cable.

Step 2: Start the terminal simulation software such as HyperTerminal on the computer.

Step 3: Set the parameters of the HyperTerminal: 9600 bits per second, 8 data bits, no parity, 1 stop bit and no flow control.

Quick Connect	✕
Protocol: Serial ⌄	
The port may be manually entered or selected from the list.	
Port: COM3 ⌄	
Baud rate: 9600 ⌄	┌─ Flow Control ─
Data bits: 8 ⌄	☐ DTR/DSR
Parity: None ⌄	☐ RTS/CTS
Stop bits: 1 ⌄	☐ XON/XOFF
Name of pipe:	
☐ Show quick connect on startup	☐ Save session
	☐ Open in a tab
	Connect Cancel

Step 4: After setting the parameters, click **Connect** to enter.

Troubleshooting

Power System Fault

The indicator on the front panel of host is OFF. The Status indicator of fan module is OFF, and the fan does not work. The indicator on the panel of the power module is OFF and the fan does not work. Please check the following:

First disconnect the power cord of the power module.

1. Whether the cables of the cabinet have been correctly connected.
2. Whether the cabinet power sockets are loosely connected to power modules.
3. Whether the power modules are installed correctly.

Connecting the Switch Remotely Unsuccessfully

1. Test network connectivity through ping.
2. If the network is reachable, try restarting the switch.
3. Check if the corresponding service is enabled.

The Port is not Working, the LED Indicator is Off

1. Ensure the switch ports are in the no shutdown state.
2. Check if the switch can read the DDM information.
3. Check if the port speed setting is correct.
4. Try looping the switch cable.

Troubleshooting for Terminal No-show

After power-on, if the configuration terminal shows nothing, you can firstly check the following:

1. Whether serial port cables are connected correctly.
2. Whether the configuration of the serial port on the HyperTerminal.

Troubleshooting for Terminal Show Error Codes

If the configuration terminal shows error codes, it is likely that the terminal (such as HyperTerminal) parameters are set incorrectly. Please confirm the parameters of the terminal (such as HyperTerminal).

Support and Other Resources

- Download   **https://www.fs.com/download.html**

- Help Center   **https://www.fs.com/service/help_center.html**

- Contact Us   **https://www.fs.com/contact_us.html**

Product Warranty

FS ensures our customers that any damage or faulty items due to our workmanship, we will offer a free return within 30 Days from the day you receive your goods. This excludes any custom made items or tailored solutions.

Warranty: S5860 series switches enjoy 5 years limited warranty against defect in materials or workmanship. For more details about warranty, please check at
https://www.fs.com/policies/warranty.html

Return: If you want to return item(s), information on how to return can be found at
https://www.fs.com/policies/day_return_policy.html