

## **Quick Start Guide**





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**Cisco Small Business** 

**200 Series Smart Switches** 

### Welcome

Thank you for choosing the Cisco 200 Series Smart Switch, a Cisco Small Business network communications device. This device is designed to be operational right out-of-the-box as a standard bridge. In the default configuration, it will forward packets between connecting devices after powered up.

Before you begin installing the switch, make sure you have all of the package contents available, access to the *Cisco Small Business 200 Series Smart Switch Administration Guide*, and a PC with a web browser for using web-based system management tools.

#### **Package Contents**

- Cisco 200 Series Smart Switch.
- Rackmount Kit.
- Power Cord or Adapter
- This Quick Start Guide.
- Product CD.

This guide will familiarize you with the layout of the smart switch and describe how to deploy the device in your network. For additional information, see <a href="https://www.cisco.com/smb">www.cisco.com/smb</a>.



## **Mounting the Cisco Switch**

There are two ways to mount the switch:

- Set the switch on a flat surface.
- Mount the switch in a standard rack (1 rack unit high).

Do not mount the device in a location where any of the following conditions exist:

**High Ambient Temperature**—The ambient temperature must not exceed 104 degrees Fahrenheit (40 degrees Centigrade).

**Note** Some switches have a higher temperature rating. The SG200-10FP, SF200-24FP, SG200-26FP, and SG200-50FP are rated at 113 degrees Fahrenheit (45 degrees Centigrade).

**Reduced Air Flow**—Both side panels must be unobstructed to prevent overheating.

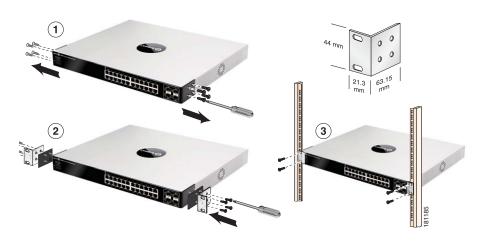
**Mechanical Overloading**—The device must be level, stable, and secure to prevent it from sliding or shifting out-of-position.

**Circuit Overloading**—Adding the device to the power outlet must not overload that circuit.

#### **Rack-Mount Placement**

- STEP 1 Remove the four screws from each side near the front of the switch. Retain the screws for re-installation. (Do not remove the four screws from each side near the back of the switch.)
- STEP 2 Place one of the supplied spacers on the side of the switch so the four holes of the spacers align to the screw holes. Place a rack mount bracket next to the spacer and reinstall the four screws removed in Step 1.

**NOTE** If your screws are not long enough to reattach the bracket with the spacer in place, attach the bracket directly to the case without the spacer.



- **STEP 3** Repeat **Step 2** for the other side of the switch.
- **STEP 4** After the mounting hardware has been securely attached, the switch is now ready to be installed into a standard 19-inch rack.



For stability, load the rack from the bottom to the top, with the heaviest devices on the bottom. A top-heavy rack is likely to be unstable and might tip over.

### **Connecting Network Devices**

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To connect the smart switch to the network:

- STEP 1 Connect the Ethernet cable to the Ethernet port of a computer, printer, network storage, or other network device.
- STEP 2 Connect the other end of the Ethernet cable to one of the numbered smart switch Ethernet ports.
  - The LED of the port lights if the device connected is active. Refer to Features of the Cisco Small Business Smart Switch, page 9 for details about the different ports and LEDs on each switch.
- STEP 3 Repeat Step 1 and Step 2 for each device you want to connect to the smart switch.

**Note** Cisco strongly recommends using Cat5 or better cable for Gigabit connectivity. When you connect your network devices, do not exceed the maximum cabling distance of 100 meters (328 feet). It can take up to one minute for attached devices or the LAN to be operational after it is connected. This is normal behavior.

#### **Power over Ethernet Considerations**



The switch is to be connected only to PoE networks without routing to the outside plant.

If your switch is one of the Power over Ethernet (PoE) models, consider the following power requirement:

200 Series Switches with Power Over Ethernet			
Model	Power Dedicated to PoE	Number of Ports Supporting PoE	PoE Standard Supported
SG200-10FP	62 Watts	1—8	802.3af
SF200-24P	100 Watts	1—6 and 13—18	802.3af
SF200-24FP	180 Watts	1—24	802.3af
SF200-48P	180 Watts	1—12 and 25—36	802.3af
SG200-26P	100 Watts	1—6 and 13—18	802.3af
SG200-26FP	180 Watts	1—24	802.3af
SG200-50P	180 Watts	1—12 and 25—36	802.3af
SG200-50FP	375 Watts	1—48	802.3af



Consider the following when connecting switches capable of supplying PoE:

The PoE models of the switches are PSE (Power Sourcing Equipment) that are capable of supplying DC power to attaching PD (Powered Devices). These devices include VoIP phones, IP cameras, and wireless access points. The PoE switches can detect and supply power to pre-standard legacy PoE Powered Devices. Due to the support of legacy PoE, it is possible that a PoE switch acting as a PSE may mistakenly detect and supply power to an attaching PSE, including other PoE switches, as a legacy PD.

Even though PoE switches are PSE, and as such should be powered by AC, they could be powered up as a legacy PD by another PSE due to false detection. When this happens, the PoE switch may not operate properly and may not be able to properly supply power to its attaching PDs.

To prevent false detection, you should disable PoE on the ports on the PoE switches that are used to connect to PSEs. You should also first power up a PSE device before connecting it to a PoE switch. When a device is being falsely detected as a PD, you should disconnect the device from the PoE port and power recycle the device with AC power before reconnecting its PoE ports.



## **Configuring the Cisco Small Business Smart Switch**

#### **Before You Begin**

Verify the managing computer requirements in the product release notes.

#### Accessing and Managing Your Switch Using the Web-Based Interface

To access the switch by using the web-based interface, you must know the IP address the switch is using. The switch uses the factory default IP address of **192.168.1.254** by default. When the switch is using the factory default IP address, the System LED flashes continuously. When the switch is using a DHCP server-assigned IP address or an administrator has configured a static IP address, the System LED is on solid (DHCP is enabled by default).

**Note** If you are managing the switch through a network connection and the switch IP address is changed, either by a DHCP server or manually, your access to the switch will be lost. You must enter the new IP address the switch is using into your browser to use the web-based interface.

To configure the smart switch:

- **STEP 1** Power on the computer and the switch.
- **STEP 2** Set the IP configuration on your computer.
  - a. If the switch is using the factory default IP address of 192.168.1.254, you must chose an IP address for the computer in the range of 192.168.1.1—192.168.1.253 that is not already in use.
  - b. If the IP addresses is assigned by a DHCP server, make sure the DHCP server is running and can be reached from the switch and the computer. It might be necessary to disconnect and reconnect the devices for them to discover their new IP addresses from the DHCP server.

**NOTE** Details on how to change the IP address on your computer depend upon the type of architecture and operating system you are using. Use the computer Help and Support functionality to search for "IP Addressing."

- STEP 3 Open a Web browser window. If you are prompted to install an Active-X plug-in when connecting to the device, follow the prompts to accept the plug-in.
- STEP 4 Enter the switch IP address in the address bar and press **Enter**. For example, http://192.168.1.254.
  - The Switch Login Page displays.
- **STEP 5** Enter the default login information:
  - Username is cisco
  - Default password is cisco (passwords are case sensitive)
- STEP 6 If this is the first time that you have logged on with the default username and password, the *Change Password Page* opens. The rules for constructing a new login and password are displayed on the page. Enter a new administrator password and click **Apply**.



Make sure that any configuration changes made are saved to the Startup configuration before exiting from the web-based interface by clicking on the **Save** icon. Exiting before you save your configuration will result in all current changes being lost the next time the switch is rebooted.

The **Getting Started** window displays. You are now ready to configure the switch. Refer to the *Cisco 200 Series Smart Switch Administration Guide* for further information.

#### **Troubleshoot Your Connection**

If you cannot access your switch from the web-based interface, the switch may not be reachable from your computer. You can test network connections by using **ping** on a computer running Windows:

- STEP 1 Open a command window by using Start > Run and enter cmd.
- STEP 2 At the **Command** window prompt enter **ping** and the smart switch IP address. For example **ping 192.168.1.254** (the default IP address of the smart switch).

If you can reach the switch, you should get a reply similar to the following:

```
Pinging 192.168.1.254 with 32 bytes of data:
Reply from 192.168.1.254: bytes=32 time<1ms TTL=128
```

If you cannot reach the switch, you should get a reply similar to the following:

```
Pinging 192.168.1.254 with 32 bytes of data: Request timed out.
```

#### **Possible Causes and Resolutions**

#### No Power:

Power up the switch and your computer if they are turned off.

#### Bad Ethernet connection:

Check the LEDs for proper indications. Check the connectors of the Ethernet cable to ensure they are firmly plugged into the switch and your computer.

#### Wrong or conflicting IP address:

Make sure that you are using the correct IP address of the switch. You can verify the current IP address of the switch with your network administrator. The System LED provides an indication of where the switch received the IP address, see Section 4 for details.

Make sure that no other device is using the same IP address as the switch.

#### No IP route:

If the switch and your computer are in different IP subnets, you need one or more routers to route the packets between the two subnets.

#### Unusually long access time:

Due to the spanning tree loop detection logic, adding new connections might take 30 to 60 seconds for the affected interfaces and/or LAN to become operational.



## **Features of the Cisco Small Business Smart Switch**

This section describes the exterior of the smart switches including ports, LEDs, and connections. Not all models will have all of the features described.

#### **Ports**

**RJ-45 Ethernet Ports**—Use these ports to connect network devices, such as computers, printers, and access points, to the switch.

- SFP (if present)—The small form-factor pluggable (SFP) ports are connection points for modules, so the switch can link to other switches. These ports are also commonly referred to as miniGigaBit Interface Converter (miniGBIC) ports. The term SFP will be used in this guide.
- SFP ports are compatible with Cisco modules MGBT1, MGBSX1, MGBLH1, MGBLX1, MGBBX1, MFELX1, MFEFX1, and MFEBX1, as well as other brands of modules.
- Some SFP interfaces are shared with one other RJ-45 port, called a combo port. When the SFP is active, the adjacent RJ-45 port is disabled.
- The LEDs of the corresponding RJ-45 port flashes green to respond to the miniGBIC interface traffic.

#### **LEDs**

**System LED**—(Green) Lights steady when the switch is powered on, and flashes when booting, performing self tests, and acquiring an IP address. If the LED flashes amber, the switch has detected a hardware failure.

**LINK/ACT LED**—(Green) Located on the left of the port. Lights steady when a link between the corresponding port and another device is detected. Flashes when the port is passing traffic.

**NOTE** The System and LINK/ACT LEDs are on each model of the switch. The following LEDs are only present on switch models that have those capabilities:

**PoE (if present)**—(Amber) Located on the right of the port. Lights steady to indicate that power is being supplied to a device attached to the corresponding port.

**100M LED (if present)**—(Green) Located on the right of the port. Lights steady when another device is connected to the port, is powered on, and a 100 Mbps link is established between the devices. When the LED is off, the connection speed is under 100 Mbps or nothing is cabled to the port.

**Gigabit LED (if present)**—(Green) Located on the right of the port. Lights steady when another device is connected to the port, is powered on, and a 1000 Mbps link is established between the devices. When the LED is off, the connection speed is under 1000 Mbps or nothing is cabled to the port.

**SFP (if present)**—(Green) Located on the right of a GE port. Lights steady when a connection is made through the shared port. Flashes when the port is passing traffic.

#### **Additional Features**

The switch might also have a reset button. The switch can be reset by inserting a pin or paper clip into the reset opening. See "Returning the Device to the Factory Default Settings" for details.

#### **Back Panel**

The power port is located on the back panel of the smart switch.

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# Returning the Device to the Factory Default Settings

To use the **Reset** button to reboot or reset the smart switch, do the following:

- To reboot the smart switch, press the Reset button for less than 10 seconds.
- To **restore** the smart switch configuration to the factory default settings:
  - Disconnect the smart switch from the network or disable all DHCP servers on your network.
  - With the power on, press and hold the Reset button for more than 10 seconds.

## Where to Go From Here

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Support			
Cisco Small Business Support Community	www.cisco.com/go/smallbizsupport		
Cisco Small Business Support and Resources	www.cisco.com/go/smallbizhelp		
Cisco Small Business Support Center (SBSC) Contacts	www.cisco.com/go/sbsc		
Cisco Small Business Firmware	www.cisco.com/go/smallbizfirmware		
Downloads	Select a link to download firmware for Cisco Small Business Products. No login is required.		
Product Documentation			
Cisco Small Business Smart Switches	www.cisco.com/go/200switches		
Regulatory, Compliance, and Safety Information	www.cisco.com/en/US/docs/switches/lan/csb_switching_general/rcsi/Switch_RCSI.pdf		
Warranty Information	www.cisco.com/go/warranty		
Cisco Small Business			
Cisco Partner Central for Small Business (Partner Login Required)	www.cisco.com/web/partners/sell/smb		
Cisco Small Business Home	www.cisco.com/smb		



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