



# Quick Start Guide



Cisco Small Business

## 200E Series Advanced Smart Switches

# Welcome

Thank you for choosing the Cisco 200E series Advanced 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 power up.

## Package Contents

- Cisco SF200E-24/P or SF200E-48/P Advanced Smart Switch
- Rackmount Kit
- Power Cord or Power Adapter
- This Quick Start Guide
- Product CD
- Serial Cable
- Rubber Feet

This guide will familiarize you with the layout of the advanced smart switch and describe how to deploy the device in your network. For additional information, see [www.cisco.com/smb](http://www.cisco.com/smb).

## 1 Mounting the Cisco Switch

There are two ways to physically install the switch:

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

Do not deploy 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).

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

**Mechanical Overloading**—The device should 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

To rack-mount the switch in any standard rack, attach the rack-mount brackets to the sides of the switch with the supplied hardware and secure the brackets tightly.



### CAUTION

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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 may tip over.

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# 2

## Connecting Network Devices

To connect the advanced smart switch to the network:

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**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 network Ethernet cable to one of the numbered advanced 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 8](#) 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 advanced 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.

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## Power over Ethernet (PoE) Considerations

If your switch is one of the PoE models, consider the following:

As a PSE (Power Sourcing Equipment) device, the switch can deliver a maximum of 15.4 Watts per PoE port to a PD (Powered Device).



### WARNING

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

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PoE is available on the following ports:

Model	Ports
SF200E-24P	1—6 and 13—18
SF200E-48P	1—12 and 25—36

Use the following table to determine the total power budget available for all devices on your particular model of switch.

Model	Power Dedicated to PoE
SF200E-24P	100 Watts
SF200E-48P	180 Watts

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# Configuring the Cisco Small Business Smart Switch

## Before You Begin

Verify that a computer with Microsoft Internet Explorer (version 6 and higher) or Firefox (version 2.0 or higher) is available.

The switch can be accessed and managed by two different methods; over your IP network using the web-based interface, or by the CLI through the console port. Using the console port requires advanced skills.

The switch works with Cisco Small Business network tools and services including the Cisco FindIT Network Discovery Utility that enables you to automatically discovers all supported Cisco Small Business devices in the same local network segment as your PC. You can get a snapshot view of each device or launch the product configuration utility to view and configure the settings. For more information, see [www.cisco.com/go/findit](http://www.cisco.com/go/findit).

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

To access the switch with a web-based interface, you must know the IP address the switch is using. The default configuration of the switch is to use its factory default IP address of **192.168.1.254** until it has obtained an IP address from a DHCP server.

When the switch is using the factory default IP address, the System LED flashes continuously. When the switch is using a DHCP-assigned IP address or an administrator-configured static IP address, the System LED is on solid.

**NOTE** If the advanced smart switch IP address is changed, either by a DHCP server or manually, your access to the advanced smart switch will be lost and you must enter the new IP address to use the web-based interface.

## Use the Web-Based Interface

To configure the advanced smart switch:

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**STEP 1** Power on the computer and the switch.

**STEP 2** Connect the computer to the switch by connecting them directly with an Ethernet cable, by connecting them both to the same IP subnetwork, or through a router if they are on different subnetworks.

**STEP 3** Set up the IP configuration on your computer.

- a. If the switch is using the default static IP address of **192.168.1.254**, you must choose an IP address in the range of 192.168.1.2—192.168.1.253 that is not already in use.
- b. If the IP addresses will be assigned by DHCP, make sure your DHCP server is running and can be reached from the switch and the computer. You may need 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 your computer's local Help and Support functionality and search for "IP Addressing".

**STEP 4** 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 5** Enter the switch IP address in the address bar and press **Enter**. For example, **http://192.168.1.254**.

The *Advanced Smart Switch Login Page* displays.

**STEP 6** Enter the default login information:

The default username is **cisco**, and the default password is **cisco**.

**STEP 7** If this is the first time that you have logged on with the default username and password, the *Change Password Page* opens.

**STEP 8** Enter a new password between 1 and 64 characters (depending upon the Password Strength setting) and confirm the password.

**NOTE** Password complexity is enabled by default. The password must comply with the default complexity rules or it can be disabled temporarily by selecting **Disable Password Strength Enforcement**.



**CAUTION**

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Make sure that any configuration changes made are saved before exiting from the web-based interface by clicking on the **Save** icon, then clicking **Apply**. Exiting before you save your configuration will result in all changes being lost.

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

## Use the console port

To configure the advanced smart switch:

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**STEP 1** Connect a computer to the switch console port using the provided console port cable.

**STEP 2** Start a console port utility, such as HyperTerminal, on the computer.

**STEP 3** Configure the utility with the following parameters:

- 115200 bits per second
- 8 data bits
- no parity
- 1 stop bit
- no flow control

**STEP 4** Enter the default login information:

The default username is **cisco**, and the default password is **cisco**.

**STEP 5** If this is the first time that you have logged on with the default username and password, you must change the password.

**STEP 6** Enter a new password between 1 and 64 characters (depending upon the Password Strength setting) and confirm the password.

**NOTE** Password complexity is enabled by default. The password must comply with the default complexity rules or it can be disabled temporarily by entering “y” to the “override the password complexity check” question.

**CAUTION**

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Make sure that any configuration changes made are saved before exiting.

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You are now ready to configure the switch. Refer to the *Cisco Small Business Advanced Smart Switch Command Reference Guide* for further information.

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## Next Steps

The following optional tasks can be accomplished by using the procedures in the *Cisco Small Business Advanced Smart Switch Administration Guide*.

- If you are not using DHCP on your network, set the connection type on the advanced smart switch to **Static** and change the static IP address and subnet mask to match your network topology.
- Save your settings
- Return your computer to its original settings

## 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**, for example, on a computer running Windows:

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**STEP 1** Open a command window by using **Start > Run** and enter **cmd**.

**STEP 2** At the **Command** window prompt enter **ping** and the advanced smart switch IP address. For example **ping 192.168.1.254** (the default static IP address of the advanced 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.
```

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## 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.

### *Bad Console port connection:*

Check the console cable connectors to make sure they are firmly plugged into the switch and your computer. Make sure the console port utility is configured with the correct parameters.

### *Wrong IP address:*

Make sure you are using the correct IP address of the switch. You can determine the current IP address of the switch from the CLI through the console port interface, or from 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 standard spanning tree loop detection logic, adding new connections may take 30 to 60 seconds for the affected interfaces and/or LAN to become operational.

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## Features of the Cisco Small Business Smart Switch

This section describes the exterior of the advanced smart switches including ports, LEDs, and connections.

### Front Panel Ports

The ports and LEDs are located on the front panel of the switch.

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

**MiniGBIC (if present)**—The miniGBIC (gigabit interface converter) ports are connection points for miniGBIC modules, so the advanced smart switch can uplink to other switches by using optical fiber.

- MiniGBIC ports are compatible with Cisco miniGBIC modules MGBSX1, MGBLH1, MGBLX1, MGBBX1, MFELX1, MFEFX1, and MFEBX1, as well as other brands of miniGBIC modules.
- MiniGBIC interface is a combination port shared with one other RJ-45 interface. When the MiniGBIC is active, the adjacent RJ-45 port is disabled.
- The LEDs of the corresponding RJ-45 port light to respond to the miniGBIC interface traffic.

## Front Panel LEDs

**System LED**—(Green) Lights steady when the switch is powered on. 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.

**MiniGBIC (if present)**—(Green) Located on the right of the port. Lights steady when a connection is made through the shared RJ-45 port. Flashes when the port is passing traffic.

## Additional Front Panel Features

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

**Console**—The Console port is where you can connect a serial cable to a computer serial port to configure the switch by using a terminal emulation program.

**Power**—The Power port is where you connect the switch to power.

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## Returning the Device to the Factory Default Settings

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

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

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## Where to Go From Here

**Support**

Cisco Small Business Support Community	<a href="http://www.cisco.com/go/smallbizsupport">www.cisco.com/go/smallbizsupport</a>
Cisco Small Business Support and Resources	<a href="http://www.cisco.com/go/smallbizhelp">www.cisco.com/go/smallbizhelp</a>
Phone Support Contacts	<a href="http://www.cisco.com/en/US/support/tsd_cisco_small_business_support_center_contacts.html">www.cisco.com/en/US/support/tsd_cisco_small_business_support_center_contacts.html</a>
Cisco Small Business Firmware Downloads	<a href="http://www.cisco.com/cisco/software/navigator.html?a=a&amp;i=rpm">www.cisco.com/cisco/software/navigator.html?a=a&amp;i=rpm</a> Select a link to download firmware for Cisco Small Business Products.

**Product Documentation**

Cisco Small Business Advanced Smart Switches Click on the Resources Tab.	<a href="http://www.cisco.com/go/200switches">www.cisco.com/go/200switches</a>
Regulatory, Compliance, and Safety Information	<a href="http://www.cisco.com/en/US/docs/switches/lan/csb_switching_general/rcsi/Switch_RCSI.pdf">www.cisco.com/en/US/docs/switches/lan/csb_switching_general/rcsi/Switch_RCSI.pdf</a>
Warranty Information	<a href="http://www.cisco.com/go/warranty">www.cisco.com/go/warranty</a>

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Cisco Small Business Home	<a href="http://www.cisco.com/smb">www.cisco.com/smb</a>

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