



# Quick Start Guide



## Cisco Small Business 300 Series Managed Switches

# Welcome

Thank you for choosing the Cisco 300 Series Managed 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 SF 300-08, SF 302-08, SF 302-08MP, SF 302-08P, SG 300-10, SG 300-10MP, SG 300-10P, SG 300-20, SF 300-24, SF 300-24P, SG 300-28, SG 300-28P, SF 300-48, SF 300-48P, or SG 300-52 Managed Switch
- Rackmount Kit
- Power Cord (power adapter included with 8-port devices)
- This Quick Start Guide
- Product CD
- Serial Cable

This guide will familiarize you with the layout of the managed 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 three ways to physically install the switch:

- Set the switch on a flat surface.
- Mount the switch on a wall (8-port devices only).
- 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.

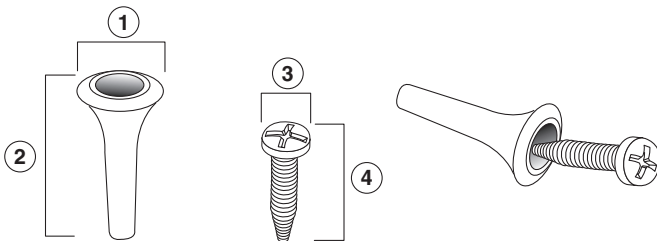
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## Wall Mounting

Only the 8-port models of the switch can be wall-mounted.

**NOTE** The switch should be mounted so that the ports face up or down. Do not mount the switch with the ports to the side.

There is a wall-mount kit packed with your switch. The dimensions for the mount kit are as follows:



1 8 mm/0.4 in    2 22.2 mm/0.9 in    3 6.8 mm/0.3 in    4 17.6 mm/0.7 in

Mount the managed switch to the wall by drilling two pilot holes 3.7 inches (95 mm) apart, attaching the provided anchors and screws to the wall, then sliding the switch into position on the screws.

The switch should have a minimum of 5 inches (130 mm) of clearance on all sides.



### WARNING

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Insecure mounting may damage the device or cause injury. Cisco is not responsible for damages incurred by insecure wall-mounting.

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# 2

## Connecting Network Devices

To connect the managed 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 managed switch Ethernet ports.

The LED of the port lights if the device connected is active. Refer to **Features of the Cisco Small Business Managed Switch, page 10** 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 managed 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).

# 3

## Configuring the Cisco Small Business Managed 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 smart switch configuration utility, or by the menu CLI through the console port. Using the console port requires advanced user skills.

### Accessing and Managing Your Switch Using the Web-Based Smart Switch Configuration Utility

In order to access the switch with a web-based smart switch configuration utility, you will need to 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, its power LED flashes continuously. When the switch is using a DHCP assigned IP address or an administrator configured static IP address, the power LED is on solid.

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

### Use the Web-Based Smart Switch Configuration Utility

To configure the managed switch:

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

**STEP 2** Connect the computer to the switch. You can connect to the same IP subnet as the switch by connecting them directly with an Ethernet cable, or by connecting to the same LAN where the switch is located through other switches. You can also connect your computer to the switch from another IP subnet through one or more IP routers.

**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 computers 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 *Managed Switch Login Page* displays.

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

Username is **cisco**

Default password is **cisco** (passwords are case sensitive)

**STEP 7** If this is the first time that you have logged on with the default username and password, the *Change Password Page* opens. Enter a new administrator password and then click **Apply**.



**CAUTION**

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Make sure that any configuration changes made are saved before exiting from the web-based smart switch configuration utility by clicking on the **Save** icon. 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 Managed Switch Administration Guide* for further information.

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## Use the console port

To configure the managed 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 a user name and password. User names and passwords are both case sensitive and alpha-numeric. 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, the *Change User Password Page* opens. Select **Edit**, enter a new administrator password and then select **Execute**.



**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 Managed Switch Administration Guide* for further information.

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### Next Steps

- If you are not using DHCP on your network, set the connection type on the managed 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

These tasks can be accomplished by using the procedures in the *Cisco Small Business Managed Switch Administration Guide*.

## Troubleshoot Your Connection

If you cannot access your switch from the web-based smart switch configuration utility, the switch may not be reachable from your computer. You can test network connections by using **ping** 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 *managed switch IP address*. For example **ping 192.168.1.254** (the default static IP address of the managed 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 status of where you received the current IP address of the switch from the system LED. You can determine the current IP address of the switch from the menu CLI through the console port interface, or from your network administrator.

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.

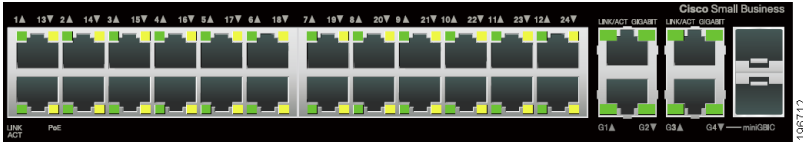
# 4

## Features of the Cisco Small Business Managed Switch

This section describes the exterior of the managed 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 managed 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, 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.

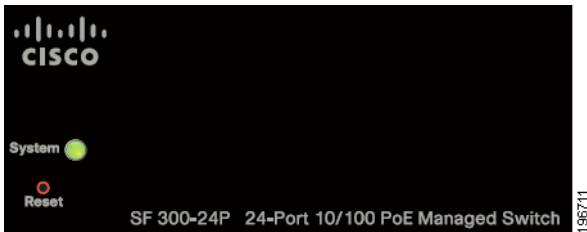
**100M LED (if present)**—(Green) Located on the right of the port. Lights steady when another device is connected to the port, is powered on, and a 100 Mbps link is established between the devices. When the LED is off, the connection speed is under 100 Mbps or nothing is cabled to the port.

**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.

**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

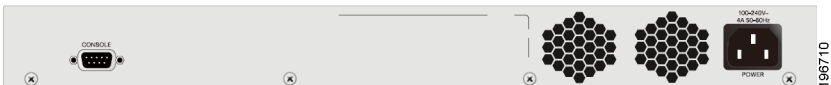
The switch also has a reset button.



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 and console port are located on the back panel of the managed switch.



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

**Console**—The Console port is where you can connect a serial cable to a computers serial port for configuration using a terminal emulation program.

# 5

## Returning the Device to the Factory Default Settings

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

- To **reboot** the managed switch, press the **Reset** button for less than 10 seconds.
- To **restore** the managed switch configuration to the factory default settings:
  1. Disconnect the managed 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.

## 6

## 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	<p><a href="http://www.cisco.com/go/smallbizfirmware">www.cisco.com/go/smallbizfirmware</a></p> <p>Select a link to download firmware for Cisco Small Business Products. No login is required.</p> <p>Downloads for all other Cisco Small Business products, including Network Storage Systems, are available in the Download area on Cisco.com at <a href="http://www.cisco.com/go/software">www.cisco.com/go/software</a> (registration/login required).</p>
Product Documentation	
Cisco Small Business Managed Switches	<a href="http://www.cisco.com/go/smallbizmanagedswitches">www.cisco.com/go/smallbizmanagedswitches</a>
300 Series Managed Switches Quick Start Guide	<a href="http://www.cisco.com/en/US/docs/switches/lan/csbms/sf30x_sg30x/quick_start/guide/78-19252-01.pdf">www.cisco.com/en/US/docs/switches/lan/csbms/sf30x_sg30x/quick_start/guide/78-19252-01.pdf</a>
300 Series Managed Switches Administration Guide	<a href="http://www.cisco.com/en/US/docs/switches/lan/csbms/sf30x_sg30x/administration_guide/78-19308-01.pdf">www.cisco.com/en/US/docs/switches/lan/csbms/sf30x_sg30x/administration_guide/78-19308-01.pdf</a>
Regulatory, Compliance, and Safety Information	<a href="http://www.cisco.com/en/US/docs/switches/lan/csbms/sfe2000/release/notes/Class_A_Switches_RCSI.pdf">www.cisco.com/en/US/docs/switches/lan/csbms/sfe2000/release/notes/Class_A_Switches_RCSI.pdf</a>
Warranty Information	<a href="http://www.cisco.com/go/warranty">www.cisco.com/go/warranty</a>
Cisco Small Business	
Cisco Partner Central for Small Business (Partner Login Required)	<a href="http://www.cisco.com/web/partners/sell/smb">www.cisco.com/web/partners/sell/smb</a>
Cisco Small Business Home	<a href="http://www.cisco.com/smb">www.cisco.com/smb</a>





## Americas Headquarters

Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134-1706  
USA

<http://www.cisco.com>

Tel: 408 526-4000

Small Business Support US: 1-866-606-1866 (Toll Free, 24/7)

[Small Business Support Global Contact Numbers](#)



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