# Quick Start Guide



401331

# Cisco 350XG Series 10G Stackable Managed Switches

# Welcome

Thank you for choosing the Cisco 350XG Series 10G Stackable Managed Switch, a Cisco network communications device. This device is designed to be operational right out-of-the-box as a standard layer 2 and 3 switch. In the default configuration, it will forward packets between connecting devices after power up.

This guide familiarizes you with the layout of the switch and describes how to deploy the switch in your network. For additional information, see www.cisco.com/go/350switches.

**Package Contents**

- Cisco 350XG 10G Stackable Managed Switch
- Power Cord
- Rack-Mount Kit and Rubber Feet
- DB-9 to RJ45 Serial Cable
- This Quick Start Guide
- Pointer Card with China RoHS
- Technical Support Contacts
- EU Directives 1999/5/EC Compliance Information (for EU SKU only)

# 1 Before You Begin

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

- RJ-45 Ethernet cables (Category 6A or higher) for connecting network devices.
- Console cable for using the console port to manage your switch.
- Tools for installing the hardware. The rack-mount kit packed with the switch contains four rubber feet for desktop placement, and two brackets and twelve screws for rack-mounting.
- PC with Internet Explorer (version 8.0, 9.0, 10.0, or higher) or Firefox (version 16.0, 17.0, or higher) for using the web-based interface or the console port to manage your switch.

# **2** Mounting the Cisco 350XG Switches

There are two ways to physically install the switch:

- Place the switch on a flat surface. To place the switch on a desktop, install the four rubber feet (included) on the bottom of the switch.

- Mount the switch in a standard rack (1 rack unit high).

## Placement Tips

Do not deploy the switch in a location where any of the following conditions exist:

- **Ambient Temperature**—To prevent the switch from overheating, do not operate it in an area that exceeds an ambient temperature of 122°F (50°C).

- **Air Flow**—Be sure that there is adequate air flow around the switch.

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

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

## Rack Mounting

You can mount the switch in any standard size, 19-inch (about 48 cm) wide rack. The switch requires 1 rack unit (RU) of space, which is 1.75 inches (44.45 mm) high.

⚠️
**CAUTION**    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.

To install the switch into a 19-inch standard chassis:

**STEP 1** Place one of the supplied brackets on the side of the switch so the four holes of the brackets align to the screw holes, and then use the four supplied M4 screws to secure it.

**STEP 2** Repeat the previous step to attach the other bracket to the opposite side of the switch.

**STEP 3** After the brackets are securely attached, the switch is now ready to be installed into a standard 19-inch rack as shown here.
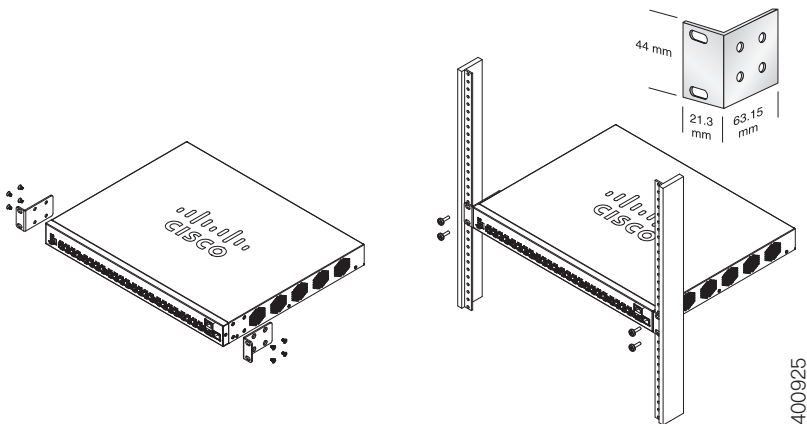


# 3  Connecting Network Devices

To connect the switch to the network:

**STEP 1** Connect an Ethernet cable to the Ethernet port of a computer, printer, network storage, or other network devices.

**STEP 2** Connect the other end of the Ethernet cable to one of the numbered Ethernet ports of the switch. The LED of the port lights if the device connected is active.

The Ethernet port light turns green when the connection is active. Refer to **Cisco 350XG Switches Features** for details about the different ports and LEDs on each switch.

**STEP 3** Repeat **Step 1** and **Step 2** for each device that you want to connect to the switch.

**NOTE** We strongly recommend using Cat6A or better cable to connect network devices. 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.

# 4 Configuring the Cisco 350XG Switches

## Before You Begin

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

These are the default settings used when configuring your switch for the first time.

| Parameter | Default Value |
|-----------|---------------|
| Username | **cisco** |
| Password | **cisco** |
| LAN IP | **192.168.1.254** |

## Configuring Your Switch Using the Web-based Interface

To access the switch with a web-based interface, you must know the IP address that the switch is using. The default configuration of the switch is to use its 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 that the switch is using into your browser to use the web-based interface. If you are managing the switch through a console port connection, the link is retained.

To configure the switch using the web-based interface:

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

**STEP 2**  Connect the computer to the OOB port on the front panel of the switch.

**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 to 192.168.1.253 that is not already in use.

   b.  If the IP addresses will be assigned by DHCP, make sure that 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 that 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**.

**STEP 6**  When the login page appears, choose the language that you prefer to use in the web-based interface and enter the username and password.

   The default username is **cisco**. The default password is **cisco**. Usernames and passwords are both case sensitive.

**STEP 7**  Click **Log In**.

   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 password are displayed on the page.

**STEP 8**  Enter a new password 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 checking **Disable** next to **the Password Strength Enforcement** option.

**STEP 9**  Click **Apply**.

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

The Getting Started page opens. You are now ready to configure the switch. Refer to the *Cisco 350XG Series 10G Stackable Managed Switches Administration Guide* or see the help pages for further information.

## Configuring Your Switch Using the Console Port

To configure the switch using the console port:

**STEP 1**   Connect a computer to the switch console port using the supplied console 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 username and password. The default username is **cisco**, and the default password is **cisco**. Usernames and passwords are both case sensitive.

If this is the first time that you have logged on with the default username and password, the following message appears:

```
Please change your password from the default
settings. Please change the password for better
protection of your network. Do you want to change
the password (Y/N) [Y]?
```

**STEP 5**   Enter **Y**, and set a new administrator password.

**NOTE** Password complexity is enabled by default. The password must comply with the default complexity rules.

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

You are now ready to configure the switch. Refer to the *Cisco 350XG Series 10G Stackable Managed Switches Command Line Interface Reference Guide* for further information.

**NOTE**  If you are not using DHCP on your network, set the IP address type on the switch to **Static** and change the static IP address and subnet mask to match your network topology. Failure to do so may result in multiple switches using the same factory default IP address of 192.168.1.254.

## Stacking the Cisco 350XG Switches

Before configuring the switches as a stack, refer to the *Cisco 350XG Series 10G Stackable Managed Switches Administration Guide* for additional details. Refer to the front panel graphics in **Cisco 350XG Switches Features** to help with the stack port descriptions and supported modules.

By default the ports on a switch function as regular Ethernet ports except if you configure them to do stacking. You cannot mix the stack speeds between the switches or ports.

**WARNING**  Stack ports must be either configured with the same port speed or have the same speed capability on the module or cable plug in. If the port speed is configured as auto, then the module plugged into these two ports will need to have the same speed capability, otherwise the switch will not be able to form as a stack with multiple units.

A stack can have up to four 350XG series switches in it. Any port of the switch can be used for stacking. The switch can only be stacked with the Cisco 350 series switches without Mesh topology.

The switches in the same stack are connected together through their stack ports. Depending on the type of stack ports and the desired speed, you may need regular Cat6A or better Ethernet cables and/or Cisco approved modules or cables for the Cisco 350XG series switches.

# **5** Cisco 350XG Switches Features

This section describes the available product models and the exterior of the switch to help familiarize you with your switch.

## Product Models

| Model | Description |
|---|---|
| SG350XG-2F10 | 12-Port 10G Stackable Managed Switch |
| SG350XG-24F | 24-Port 10G SFP+ Stackable Managed Switch |
| SG350XG-24T | 24-Port 10G Base-T Stackable Managed Switch |
| SG350XG-48T | 48-Port 10G Base-T Stackable Managed Switch |

## Front Panel

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

### SG350XG-2F10



### SG350XG-24F



### SG350XG-24T



### SG350XG-48T



### Front Panel Ports

**USB Port**—The USB port connects the switch to a USB device so that you can save and restore the configuration files, firmware images, and SYSLOG files through the connected USB device.

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

**SFP+ Port (if present)**—The small form-factor pluggable plus (SFP+) are connection points for modules so that the switch can link to other switches. These ports are also commonly referred to as mini 10GigaBit Interface Converter ports. The term SFP+ will be used in this guide.

- The SFP+ ports are compatible with Cisco modules MGBSX1, MGBLH1, MGBT1, MGBLX1, MGBBX1, as well as other brands of modules.

- The Cisco SFP+ 10G optical modules that are supported in the Cisco 350XG switches are: SFP-10G-SR, SFP-10G-LRM, and SFP-10G-LR.

- The Cisco SFP+ Copper Cable modules for stacking that are supported in the Cisco 350XG switches are: SFP-H10GB-CU1M, SFP-H10GB-CU3M, and SFP-H10GB-CU5M.

- The SFP+ port is a combination port, shared with one other RJ-45 port. When the SFP+ is active, the adjacent RJ-45 port is disabled.

- The LEDs of the shared RJ-45 port light to respond to the SFP+ port traffic.

**OOB+ Port**—The Out of Band (OOB) port is a CPU's Ethernet port that can be used only as a management interface. Bridging between the OOB port and the in-band Layer 2 interface is not supported.

### Front Panel LEDs

**Master**—(Green) Lights steady when the switch is a stack master.

**System**—(Green) Lights steady when the switch is powered on, and flashes when booting, performing self-tests, or acquiring an IP address. If the LED flashes Amber, the switch has detected a hardware failure, a firmware failure, and/or a configuration file error.

**Stack ID**—(Green) Lights steady when the switch is stacked and the corresponding number indicates its Stack ID.

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

**XG**—(Green) Located on the right of a 10G port. Lights steady when another device is connected to the port, is powered on, and a 10 Gbps link is established between the devices. When the LED is off, the connection speed is under 10 Gbps or nothing is cabled to the port.

**Gigabit**—(Green) Located on the right of the OOB 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 10G port. Lights steady when a connection is made through the shared port. Flashes when the port is passing traffic.

### Reset Button

The switch can be reset by inserting a pin or paper clip into the **Reset** button opening on the front panel of the switch. See **Returning the Cisco 350XG Switches to the Factory Default Settings** for details.

## Back Panel

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



**Power**—Connects the switch to AC power.

**Console**—Connects a serial cable to a computer serial port so that it can be configured by using a terminal emulation program.

## 6 Returning the Cisco 350XG Switches to the Factory Default Settings

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

- To **reboot** the switch, press and hold the **Reset** button for less than ten seconds.

- To **restore** the switch to its factory default settings:

  – Disconnect the 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 ten seconds.

## 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 selecting **Start** > **Run** and enter **cmd**.

STEP 2  At the **Command** window prompt, enter **ping** and the switch IP address. For example, **ping 192.168.1.254** (the default static IP address of the 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 that they are firmly plugged into the switch and your computer.

*Bad Console port connection:*

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

*Wrong IP address:*

Make sure that 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, or from your network administrator. The System LED provides an indication of where the switch received the IP address (See **Front Panel** for details.) Make sure that no other device is using the same IP address as the switch.

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*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.

# 7 Where to Go From Here

| Support | |
|---|---|
| Cisco Support Community | www.cisco.com/go/smallbizsupport |
| Cisco Support and Resources | www.cisco.com/go/smallbizhelp |
| Phone Support Contacts | www.cisco.com/en/US/support/ tsd_cisco_small_business _support_center_contacts.html |
| Cisco Firmware Downloads | www.cisco.com/go/smallbizfirmware<br><br>Select a link to download firmware for Cisco Products. No login is required. |
| Cisco Open Source Requests | www.cisco.com/go/ smallbiz_opensource_request |
| Cisco Partner Central (Partner Login Required) | www.cisco.com/web/partners/sell/smb |
| **Product Documentation** | |
| Cisco 350XG Switches | www.cisco.com/go/350switches |
| Regulatory Compliance and Safety Information | www.cisco.com/en/US/docs/switches/lan/ csb_switching_general/rcsi/ Switch_RCSI.pdf |
| Warranty Information | www.cisco-warrantyfinder.com |

**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.