Get to Know the Sx250 Series Smart Switches

Introduction



The Cisco Sx250 Series Smart Switches are designed to be easy to configure, manage, and troubleshoot, allowing you to focus on your business priorities. These switches are equipped with a new generation of highly-integrated, cost-effective packet processors targeted for Carrier Ethernet and Small-Medium Enterprise (SME) applications with full wire-speed performance Fast Ethernet (FE) or Gigabit Ethernet (GE) ports, and GE Combo platforms.

The web-based utility allows you to deploy and manage your network efficiently. Setting up and troubleshooting can be done easily with easy-to-use tools such as Cisco Discovery Protocol (CDP), FindIT Network Management, and Cisco Smartports, which let your network automatically detect and configure all connected Cisco devices.

This article shows the features and functions of the Sx250 Smart Switches.

Applicable Devices

- SF250 Series
- SG250 Series

Software Version

• 2.2.5.68

Sx250 Series Features

- USB Port for image and configuration load or store operations
- Supports USB version 2.0, and support file system of FAT32 for read/write and NTFS for read-only
- The USB port allows backing up and loading configuration files or new image files
 - Mini-GBIC interface
- Supports auto-detect 100M or 1000M Small Form-Factor Pluggable (SFP) modules and autoconfigures the correct speed
- The speed of the SFP ports can be manually configured

- Physical Layer (PHY)-less ports do not support 100 Mbps speed
 - Combo Port Support
- Combo port consists of one RJ45 interface and one Mini-GBIC (SFP) interface
- The SFP interface always takes the precedence over RJ45 Copper interface
- When the device detects the SFP port active, the device will disable the RJ45 port
- LED on phone jack on the RJ45 and the LED shared with the SFP interface
 - Reset Button

New Supported Features

- Web-based Utility
- Search
- Dashboard: Traffic Errors, Port Utilization
- Wizards: Access Control List (ACL)
- Save icon
- Syslog Popup
- Show tech-support
 - Traffic Monitoring
- Counters History/Counters Graph in web-based utility
- sFlow v5
 - Quality of Service (QoS)
- Egress policy
- Egress ACL
- 2 Rates 3 Colors (2R3C)
 - Port Monitor/Switched Port Analyzer (SPAN)
- 7-session SPAN
- Policy-based Flow Mirroring
 - Switch Management
- Command Line Interface (CLI) Output modifier
- Bonjour IPv6 Support

Power over Ethernet (PoE) Switches

- SF250-48HP 48-Port 10/100 PoE Smart Switch
- 48 FE + 4 GE (2 Combo + 2 SFP) ports
- AT/AF PoE (PSE) on 48 FE ports
- PoE Budget 192W
 - SG250-10P 10-Port Gigabit PoE Smart Switch
- 8 GE + 2 GE (2 Combo) ports
- AT/AF PoE (PSE) on 8 GE ports
- PoE Budget 62W
- 2 Powered Device (PD) ports AF/AT/60W
 - SG250-26P 26-Port Gigabit PoE Smart Switch

- 24 GE + 2 GE (2 Combo) ports
- AT/AF PoE (PSE) on 24 GE ports
- PoE Budget 192W
 - SG250-26HP 26-Port Gigabit PoE Smart Switch
- 24 GE + 2 GE (2 Combo) ports
- AT/AF PoE (PSE) on 24 GE ports
- PoE Budget 100W

Non-PoE Switches

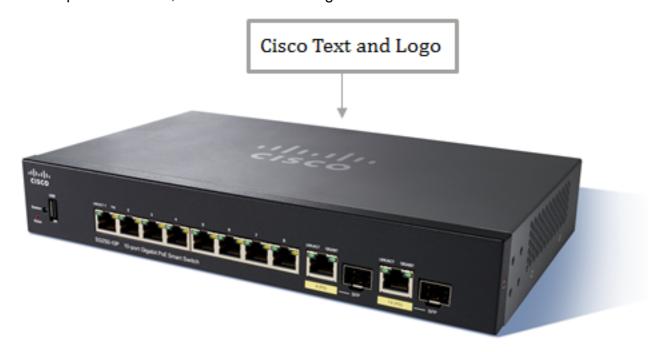
- SF250-48 48-Port 10/100 Smart Switch
- 48 FE + 4 GE (2 SFP + 2 Combo) ports
- SG250-26 26-Port Gigabit Smart Switch
- 24 FE + 2 GE (2 Combo) ports

Product Views

Note: The images below may vary depending on the model of the device that you have. In this example, SG250-10P switch is displayed.

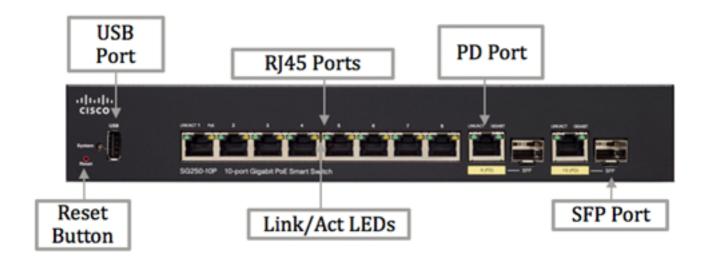
Top View

At the top of the device, the Cisco text and logo can be seen.

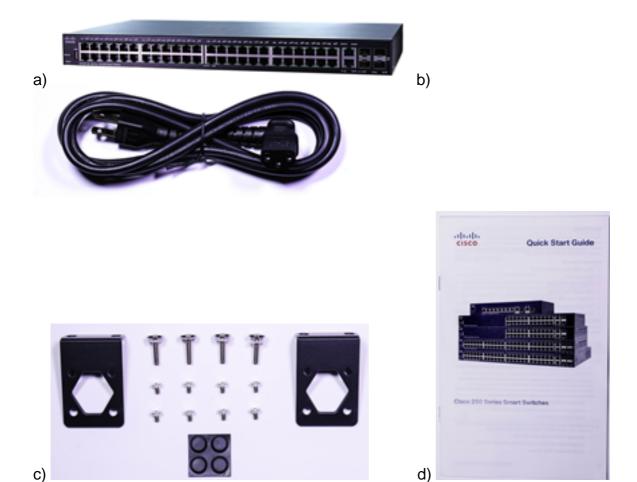


Front View

The System LED, USB, PD, SFP, and RJ45 Ports, and the Reset button are located at the front of the device.



Package Contents



- a) Cisco 250 Series Smart Switch
- b) Power cord (Power Adapter for 10-port switch models)
- c) Mounting Kit
- d) Quick Start Guide

Minimum Requirements

• Web browser: Mozilla Firefox version 36 or later; Microsoft Internet Explorer version 9 or later,

Chrome version 40 or later, Safari version 5 or later

- Category 5 Ethernet network cable
- TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed

Default Settings

Username	cisco
Password	cisco
LAN IP Address	DHCP address assigned by server
Fallback LAN IP	192.168.1.245
Subnetwork Mask	255.255.255.0

Technical Details

System LED

This LED indicates the status of the device depending on what state it is in.



Dual colors LED	System	Green OFF – System off Solid – System is on and ready Blinking – Booting/System self-test or acquiring IP address Amber Blinking – Detect hardware failed

RJ45 Ports

The RJ45 Ports or Ethernet Ports are the ports where you connect your networking devices such as computers, VOIP phones, and so on.

Non-PoE Switches: 10/100M Ports



Link/Act and Speed	Left LED LINK/ACT	Green
		OFF – No link is detected

	ON – Link is detected Blinking – Rx/Tx Data
Right LED Speed	Green OFF – 10M link is detected or no link Solid – 100M link is detected
Right LED Speed	Green OFF – 10M/100M link is detected or no link Solid – 1000M link is detected

Non-PoE Switches: 10/100/1000M or Gigabit Ports



Link/Act and Speed	Left LED LINK/ACT	Green OFF – No link is detected ON – Link is detected Blinking – Rx/Tx Data
Line Act and Opeed	Right LED Speed	Green OFF – 10M/100M is detected or no link Solid – 1000M link is detected

PoE Switches: PoEPorts

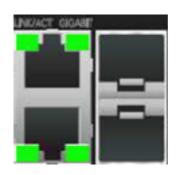


Link/Act and PoE	Left LED LINK/ACT	OFF – No link is detected
		ON – Link is detected Blinking – Rx/Tx Data
	Right LED PoE	OFF – No PD detected Solid – 802.3af/at PD is
		detected Blinking – Negotiation

Combo Ports

The combo port is a combination of two different physical ports that can be used one at a

time.



Link/Act and Speed SFP Ports share with RJ45	Left LED LINK/ACT	Green OFF – No link is detected ON – Link is detected Blinking – Rx/Tx Data
	Right LED Speed	Green OFF – 10M/100M link is detected or no link Solid – 1000M link is detected

SFP Port

The small form-factor pluggable (SFP) port is a hot-swappable input/output device that plugs into a Gigabit Ethernet port or slot, linking the port with the network.



		Green
	Left LED LINK/ACT	OFF – No link is
Dedicated Mini-GBIC Port		detected
		ON – Link is detected
		 Blinking – Rx/Tx Data
		Green
	Right LED LINK/ACT	OFF – No link is
		detected
		ON – Link is detected
		 Blinking – Rx/Tx Data

Note: To check the product specifications of the Cisco Sx250 Series Smart Switches, click https://doi.org/10.2016/journal.org/

Related Contents

Configure Initial Settings on a Switch using the Getting Started Wizard

<u>Configure Virtual Local Area Network (VLAN) Settings on a Switch via VLAN Configuration Wizard</u>