

## Cisco SG300-28P

# Cisco SG300-28P 28-Port Gigabit PoE Managed Switch User Manual

Model: SG300-28P (SRW2024PK9NA)

## 1. INTRODUCTION

This manual provides essential instructions for the installation, configuration, and operation of the Cisco SG300-28P 28-Port Gigabit PoE Managed Switch. This device is designed to offer a reliable and secure network foundation for small businesses, supporting critical applications and optimizing network performance.

The Cisco SG300-28P is part of the Cisco 300 Series, offering advanced features to enhance network availability, security, and bandwidth optimization. It is engineered for ease of setup and use in small business environments.

## 2. PRODUCT OVERVIEW

The Cisco SG300-28P is a 28-port Gigabit Power over Ethernet (PoE) managed switch. It features 24 Gigabit Ethernet ports with PoE capability and 4 additional Gigabit Ethernet ports, which are combo ports supporting either RJ45 or SFP connections. The switch is housed in a durable metal casing, suitable for desktop or rack-mount installations.



Figure 1: Cisco SG300-28P Front Panel

This image displays the front panel of the Cisco SG300-28P switch. It features 24 standard Gigabit Ethernet ports, labeled 1A through 24V, and 2 additional combo Gigabit SFP ports (G25A, G26V, G27A, G28miniGBIC) for fiber optic connections. On the left, there are System and Reset indicators. The Cisco logo and model number SG 300-28P are also visible.

### 2.1 Front Panel Components

- **System LED:** Indicates the operational status of the switch.
- **Reset Button:** Used to reset the switch to factory default settings.
- **24 x 10/100/1000 Gigabit Ethernet Ports (PoE):** RJ45 ports supporting Power over Ethernet for connecting network devices. Each port has Link/Act and PoE status LEDs.
- **4 x Combo Gigabit Ports (RJ45/SFP):** These ports can function as either standard RJ45 Gigabit Ethernet

ports or accept SFP transceivers for fiber optic connections.

## 2.2 Package Contents

Verify that your package contains the following items:

- Cisco SG300-28P 28-Port Gigabit PoE Managed Switch
- Power cable
- Rack-mount kit (if applicable)
- Documentation CD (or link to online documentation)

## 3. SETUP

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### 3.1 Physical Installation

The switch can be installed on a desktop or mounted in a standard 19-inch equipment rack.

- **Desktop Installation:** Place the switch on a flat, stable surface. Ensure adequate ventilation around the unit.
- **Rack-Mount Installation:** Use the provided rack-mount kit to secure the switch in a standard equipment rack. Follow the instructions included with the kit for proper mounting.

### 3.2 Connecting Power

1. Connect the included power cable to the power input on the rear panel of the switch.
2. Plug the other end of the power cable into a grounded electrical outlet.
3. The System LED on the front panel will illuminate when power is supplied.

### 3.3 Network Connections

1. Connect network devices (e.g., computers, servers, IP phones, wireless access points) to the RJ45 Gigabit Ethernet ports using standard Ethernet cables.
2. For fiber optic connections, insert compatible SFP transceivers into the combo SFP ports and connect fiber optic cables.
3. The Link/Act LED for each connected port will illuminate when a valid link is established and blink to indicate activity.
4. For PoE-powered devices, the PoE LED will illuminate when power is being supplied.

### 3.4 Initial Configuration Access

The switch can be configured via a web-based interface or a Command Line Interface (CLI).

- **Web-Based Interface:** Connect a computer to any port on the switch. The switch will typically obtain an IP address via DHCP or use a default IP address. Refer to the product documentation for the default IP address and login credentials. Open a web browser and enter the switch's IP address to access the management interface.
- **Command Line Interface (CLI):** For advanced users, the switch supports CLI access via a console port (if available) or SSH/Telnet after initial network configuration.

Tools like Cisco Discovery Protocol and Cisco FindIT Network Discovery Utility can assist in discovering the switch on your network and launching the web interface.

## 4. OPERATING THE SWITCH

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### 4.1 Basic Network Connectivity

Once connected and powered on, the switch will forward traffic between connected devices. For basic plug-and-play operation, no further configuration may be immediately required.

## 4.2 Power over Ethernet (PoE)

The SG300-28P provides Power over Ethernet on its 24 Gigabit Ethernet ports, allowing compatible devices such as IP phones, wireless access points, and IP cameras to receive power directly through the Ethernet cable. This eliminates the need for separate power adapters for these devices.

## 4.3 Managed Features

The switch offers a range of managed features accessible through its web-based interface or CLI:

- **Virtual LANs (VLANs):** Segment your network into separate broadcast domains for improved security and performance.
- **Quality of Service (QoS):** Prioritize network traffic for critical applications like voice (IP telephony) and video to ensure consistent performance. The switch supports automatic voice VLAN and QoS configuration for connected endpoints.
- **Security Features:** Implement Access Control Lists (ACLs) to control network access, and configure guest VLANs for secure visitor access.
- **Static Routing:** Configure static routes for inter-VLAN routing or connecting to other networks.
- **IPv6 Support:** The switch supports the latest generation of networking protocols.

# 5. MAINTENANCE

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## 5.1 Firmware Updates

Periodically check the Cisco support website for firmware updates. Keeping the switch firmware current ensures optimal performance, security, and access to new features. Follow the instructions provided with the firmware update package for the upgrade process.

## 5.2 Cleaning

To maintain proper ventilation and prevent overheating, ensure the switch's vents are clear of dust and debris. Use a soft, dry cloth to clean the exterior of the unit. Do not use liquid or aerosol cleaners.

## 5.3 Environmental Considerations

Operate the switch within its specified environmental ranges for temperature and humidity to ensure long-term reliability. Avoid placing the switch in direct sunlight or near heat sources.

# 6. TROUBLESHOOTING

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## 6.1 No Power

- Verify the power cable is securely connected to both the switch and a working electrical outlet.
- Check the power source (e.g., wall outlet, power strip) for functionality.
- Ensure the System LED is illuminated.

## 6.2 No Link on Port

- Ensure the Ethernet cable is properly connected at both ends.
- Verify the connected device is powered on and functioning correctly.
- Try a different Ethernet cable or port.
- Check the Link/Act LED for the specific port.

### 6.3 Network Performance Issues

- Check for excessive network traffic or loops.
- Review QoS settings to ensure critical traffic is prioritized.
- Verify duplex and speed settings on connected devices and switch ports.

### 6.4 Resetting the Switch

To restore the switch to its factory default settings, press and hold the Reset button on the front panel for approximately 10-15 seconds until the System LED changes its state. This action will erase all custom configurations.

## 7. SPECIFICATIONS

Feature	Specification
Model Number	SRW2024PK9NA
Brand	Cisco
Number of Ports	28 (24 x 10/100/1000 PoE, 4 x Combo Gigabit SFP)
Interface Type	PoE
Data Transfer Rate	1000 Megabits Per Second (Gigabit)
Switching Capacity	56 Gbps
Forwarding Capacity (64-byte packet size)	41.67 Mpps
Item Weight	9.06 pounds (4.11 kg)
Product Dimensions	17.3 x 1.75 x 11 inches (43.94 x 4.45 x 27.94 cm)
Voltage	240 Volts (AC input range)
Case Material	Metal
Color	Black
Included Components	Power cable
Date First Available	September 6, 2010

## 8. WARRANTY AND SUPPORT

### 8.1 Warranty Information

The Cisco SG300-28P switch is backed by a limited lifetime warranty. Please refer to the official Cisco warranty documentation for specific terms and conditions.






### 8.2 Technical Support

For technical assistance, product updates, and additional resources, please contact the Cisco Small Business Support Center or visit the official Cisco website:

- **Cisco Support Website:** <https://www.cisco.com/go/smallbusinesssupport>



**Related Documents - SG300-28P**

	<p><a href="#">Cisco Small Business 300 Series Managed Switches Quick Start Guide</a></p> <p>Get started quickly with the Cisco Small Business 300 Series Managed Switches. This guide covers unboxing, physical installation (rackmount, wallmount, desktop), network connection, initial configuration via web interface or console, and basic troubleshooting.</p>
	<p><a href="#">Cisco Small Business 300 Series Managed Switches Quick Start Guide</a></p> <p>This guide provides essential information for setting up and configuring Cisco Small Business 300 Series Managed Switches, including installation, network connection, basic configuration, and troubleshooting steps.</p>
	<p><a href="#">Cisco Small Business 300 Series Managed Switches Quick Start Guide</a></p> <p>A concise guide to installing, connecting, configuring, and troubleshooting Cisco Small Business 300 Series Managed Switches. Includes hardware overview, setup steps, and support information.</p>
	<p><a href="#">Cisco 300 Series Small Business Managed Switches: Features, Specifications, and Benefits</a></p> <p>This document provides a comprehensive overview of the Cisco 300 Series Small Business managed Ethernet switches, detailing their features, business applications, technical specifications, and ordering information. It highlights ease of use, affordability, performance, and security for small business networks.</p>
	<p><a href="#">Cisco 350 Series Managed Switches: Features, Benefits, and Specifications</a></p> <p>Explore the Cisco 350 Series Managed Switches, designed for small businesses seeking an ideal combination of features, affordability, and ease of use. Discover their advanced security, high reliability, power efficiency, and comprehensive product specifications.</p>

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Official release notes for Cisco 200, 300, 500, and ESW2 Series Switches firmware version 1.4.2.04, detailing hardware compatibility, flash file system changes, new features, addressed issues, known limitations, and support resources.