

C1000-24P-4G-L

Generic Catalyst 1000 C1000-24P-4G-L 24-Port PoE+ Gigabit Ethernet Switch User Manual

Model: C1000-24P-4G-L

1. INTRODUCTION

The Generic Catalyst 1000 C1000-24P-4G-L is a fixed managed Gigabit Ethernet Layer 2 switch designed for small businesses and branch offices. This device provides a secure, flexible, and reliable networking solution, supporting both Command-Line Interface (CLI) and an on-box web user interface for management. It is suitable for out-of-the-wiring-closet deployments and critical Internet of Things (IoT) applications, offering enhanced network security and operational efficiency.

2. SETUP

2.1. Unpacking the Switch

Carefully unpack the contents of the box. Verify that all components are present:

- Catalyst 1000 C1000-24P-4G-L Switch
- Accessories (e.g., power cord, mounting kit)
- Menu Instruction (this manual)

Inspect the switch for any physical damage. If any damage is found or components are missing, contact your vendor immediately.

2.2. Physical Installation

Choose a suitable location for the switch. Ensure the environment meets the following criteria:

- Adequate ventilation to prevent overheating.
- Stable, flat surface or a secure rack mount.
- Away from direct sunlight, heat sources, and excessive moisture.
- Access to a grounded power outlet.

Mount the switch using the provided accessories if rack-mounting is desired. Connect the power cord to the switch and then to a grounded electrical outlet.

2.3. Network Connection

Connect your network devices (computers, servers, access points) to the 24 Gigabit Ethernet ports on the front panel using standard Ethernet cables. For uplink connections or fiber optic integration, utilize the 4x1G SFP ports

with compatible SFP transceivers.

2.4. Initial Configuration

The switch can be configured via a Command-Line Interface (CLI) or an on-box web user interface. Refer to the detailed configuration guide for specific steps on accessing and configuring the switch for your network environment. Ensure basic network parameters such as IP address, subnet mask, and gateway are set correctly.

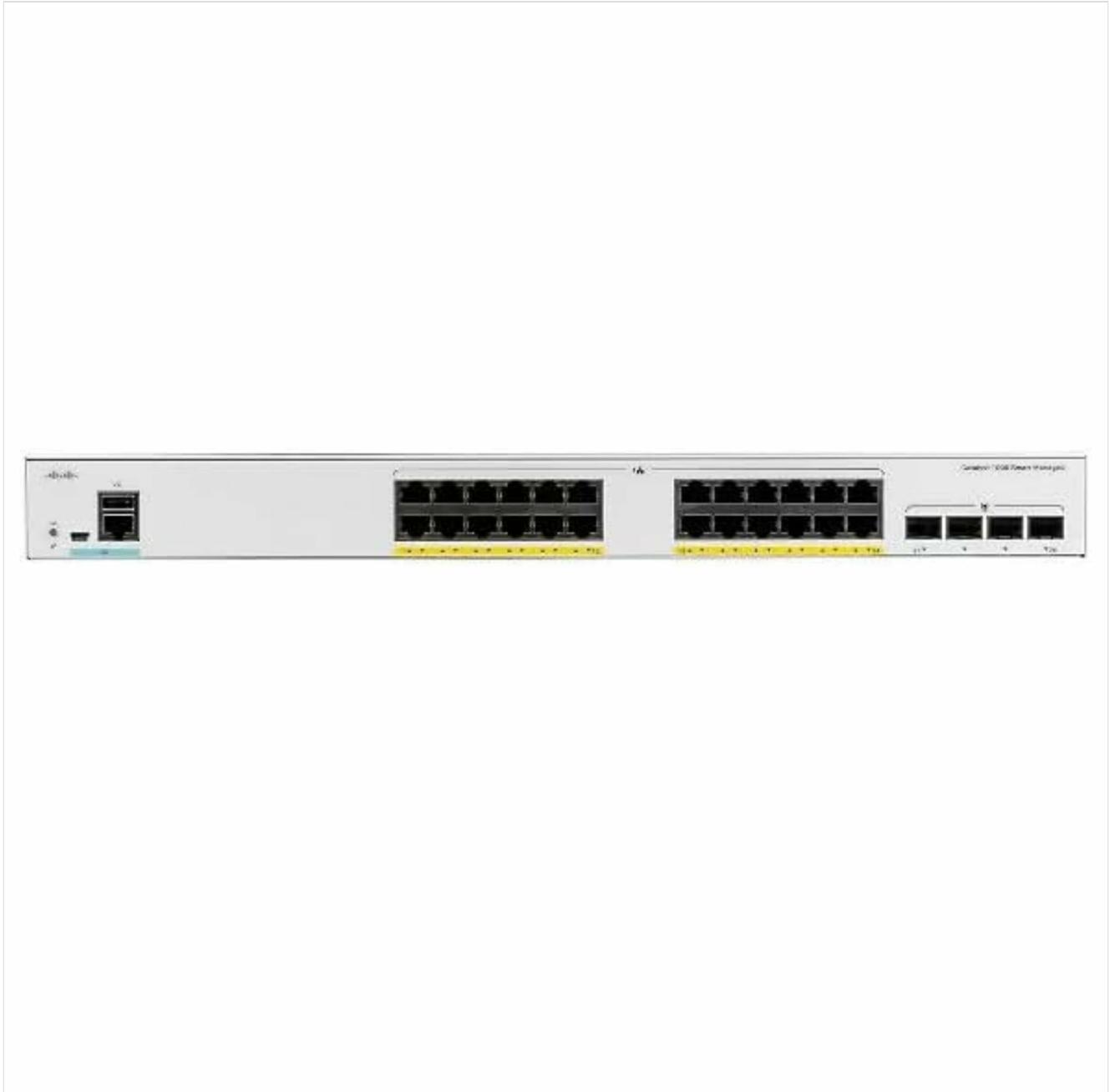


Figure 1: Front view of the Generic Catalyst 1000 C1000-24P-4G-L Switch, showing 24 Gigabit Ethernet ports and 4 SFP uplink ports.

3. OPERATING THE SWITCH

3.1. Powering On and LED Indicators

Once connected to power, the switch will automatically power on. Observe the LED indicators on the front panel. These LEDs provide status information regarding power, system health, port activity, and PoE status. Consult the detailed LED status guide for interpretation of different light patterns and colors.

3.2. Layer 2 Switching Functionality

The C1000-24P-4G-L operates as a Layer 2 switch, providing efficient traffic management within your local area network. It supports features such as VLANs, Spanning Tree Protocol (STP), and Link Aggregation Control Protocol (LACP) to optimize network performance and redundancy.

3.3. Power over Ethernet Plus (PoE+)

This switch supports Power over Ethernet Plus (PoE+) on its 24 Gigabit Ethernet ports, delivering up to 30W of power per port. This allows for direct power supply to compatible devices such as IP phones, wireless access points, and IP cameras, simplifying deployment and reducing cabling requirements.

3.4. Security Features

The switch incorporates essential security features to protect your network:

- **802.1X Authentication:** Provides port-based network access control.
- **DHCP Snooping:** Prevents unauthorized DHCP servers from distributing IP addresses.
- **Access Control Lists (ACLs):** Filters network traffic based on defined rules.

3.5. Energy Efficiency

Designed for low power consumption, the switch supports Energy Efficient Ethernet (IEEE 802.3az). This feature allows for reduced power usage during periods of low data activity, contributing to lower operational costs.

4. MAINTENANCE

4.1. Firmware Updates

Periodically check the manufacturer's website for firmware updates. Keeping the switch firmware up-to-date ensures optimal performance, security, and access to new features. Follow the provided instructions carefully when performing firmware upgrades.

4.2. Cleaning

Ensure the switch remains free of dust and debris. Use a soft, dry cloth to clean the exterior. Do not use liquid or aerosol cleaners directly on the switch. Ensure ventilation openings are clear to maintain proper airflow.

4.3. Environmental Considerations

Maintain the switch within its specified operating temperature and humidity ranges. Avoid exposing the device to extreme conditions, which can affect its lifespan and performance.

5. TROUBLESHOOTING

5.1. No Power

- Verify the power cord is securely connected to both the switch and the power outlet.
- Check if the power outlet is functional by plugging in another device.
- Ensure the power switch (if present) is in the 'ON' position.

5.2. No Network Connectivity

- Check the Ethernet cable connections between the switch and the connected device.
- Observe the port status LEDs on the switch; they should indicate activity.

- Verify the IP configuration of the connected device.
- Ensure that the switch's network configuration (e.g., VLANs) is correct.

5.3. PoE Device Not Powering On

- Confirm the connected device is PoE+ compatible.
- Check the PoE status LED for the specific port.
- Ensure the total power budget of the switch is not exceeded.
- Try connecting the device to a different PoE+ port.

5.4. Factory Reset

If persistent issues occur, a factory reset may be necessary. Refer to the detailed configuration guide for the specific procedure to reset the switch to its default settings. **Warning:** A factory reset will erase all custom configurations.

6. SPECIFICATIONS

Feature	Description
Model Number	C1000-24P-4G-L
Part Number	C1000-24P-4G-L
Number of Ports	24 x Gigabit Ethernet (10/100/1000 Mbps)
Uplink Ports	4 x 1G SFP
PoE+ Support	Yes, up to 30W per port
Switching Type	Layer 2 Managed
Security Features	802.1X, DHCP Snooping, Access Control Lists (ACLs)
Energy Efficiency	IEEE 802.3az (Energy Efficient Ethernet)
Management	CLI, On-box Web UI
Included Components	Switch, Accessories, Menu Instruction
Compatible Devices	Desktop (general network devices)
ASIN	B0DPJ9JD8G

7. WARRANTY AND SUPPORT

This product is covered by a standard manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation included with your purchase or contact your vendor. For technical support, product inquiries, or to report issues, please contact the Generic support team through the contact information provided at the point of purchase or on the manufacturer's official website.

Please have your product model number (C1000-24P-4G-L) and ASIN (B0DPJ9JD8G) available when contacting support.

