

HP J9729A

HPE 2920-48G-PoE+ Switch (J9729A) User Manual

Model: J9729A | Brand: HP

1. INTRODUCTION

This manual provides essential information for the installation, configuration, and maintenance of the HPE 2920-48G-PoE+ Switch, model J9729A. This device is designed for high-performance network environments, offering robust security, management features, and Power over Ethernet Plus (PoE+) capabilities. It is suitable for deployment at the enterprise edge, in remote branch offices, and within converged networks.

2. SETUP

2.1 Unpacking the Switch

Carefully unpack the contents of the HPE 2920-48G-PoE+ Switch box. Verify that all components are present and undamaged.

- Network Switch
- Accessories (e.g., power cord, mounting hardware, console cable)

Note: If any items are missing or damaged, contact your vendor immediately.

2.2 Physical Installation

The HPE 2920-48G-PoE+ Switch can be installed in a standard 19-inch equipment rack or placed on a flat surface. Ensure adequate ventilation around the unit to prevent overheating.

1. **Rack Mounting:** Attach the provided rack-mounting brackets to the sides of the switch using the included screws. Secure the switch into the rack using appropriate rack screws.
2. **Desktop Placement:** Place the switch on a stable, level surface. Ensure that the rubber feet are attached to the bottom of the switch to prevent slipping and provide airflow.
3. **Power Connection:** Connect the power cord to the AC power inlet on the rear of the switch and then to a grounded electrical outlet.

2.3 Initial Network Connection

Connect network devices to the RJ45 Ethernet ports on the front panel of the switch. For initial configuration, a direct console connection is recommended.



Figure 1: Front panel of the HPE 2920-48G-PoE+ Switch. This image displays the 48 Gigabit Ethernet ports with PoE+ capabilities, along with the four SFP (Gigabit) combo ports and two SFP+ uplink ports on the right side. The left side shows the power input, console port, and USB ports.

1. **Console Connection:** Use the provided RJ45 to DB9 adapter and a serial cable to connect a computer to the console port on the switch. Configure your terminal emulation software (e.g., PuTTY, Tera Term) with the following settings: 9600 baud, 8 data bits, no parity, 1 stop bit, no flow control.
2. **Network Cable Connection:** Connect Ethernet cables from your network devices (computers, access points, IP phones) to any of the 48 RJ45 ports on the switch. These ports support Power over Ethernet Plus (PoE+) for compatible devices.
3. **Uplink Connection:** For connecting to other network devices or the core network, use the SFP or SFP+ ports with appropriate transceivers and fiber optic cables, or use the dedicated 10Gbit ports if available.

3. OPERATING THE SWITCH

3.1 Basic Operation

Once powered on, the switch will perform a self-test. The system LED will indicate the operational status. Connected devices will automatically negotiate speed and duplex settings.

3.2 Management Interfaces

The HPE 2920-48G-PoE+ Switch offers multiple interfaces for configuration and management:

- **Command Line Interface (CLI):** Accessible via the console port (serial) or Telnet/SSH over the network. The CLI provides full control over all switch functions.
- **Web-based Graphical User Interface (GUI):** Accessible via a web browser by entering the switch's IP address. The GUI offers an intuitive interface for common configuration tasks.
- **SNMP:** For network management systems to monitor and manage the switch.

3.3 Key Features

- **Power over Ethernet Plus (PoE+):** Provides power to compatible devices such as IP phones, wireless access points, and surveillance cameras directly through the Ethernet cable.
- **Layer 3 Capabilities:** Supports static routing and RIP (Routing Information Protocol) for basic inter-VLAN routing and network segmentation.
- **Expansion Slots:** Features expansion slots for additional connectivity options, including 10 Gigabit Ethernet uplinks (SFP+ or 10GBase-T modules).
- **Robust Security:** Includes features like access control lists (ACLs), port security, and 802.1X authentication to

protect the network.

4. MAINTENANCE

4.1 Firmware Updates

Regularly check the HP support website for the latest firmware updates. Applying updates can improve performance, add new features, and address security vulnerabilities. Follow the instructions provided with the firmware package for a safe update process.

4.2 Cleaning

Keep the switch clean and free of dust. Use a soft, dry cloth to wipe the exterior. Ensure that ventilation openings are not obstructed. Do not use liquid or aerosol cleaners directly on the switch.

4.3 Environmental Considerations

Operate the switch within its specified temperature and humidity ranges. Avoid exposing the device to direct sunlight, excessive heat, or moisture.

5. TROUBLESHOOTING

5.1 Common Issues

- **No Power:** Verify the power cord is securely connected to both the switch and the power outlet. Check the power source.
- **No Link/Connectivity:** Ensure Ethernet cables are properly connected. Check the status LEDs on the switch and the connected device. Verify port configuration.
- **PoE Device Not Powering On:** Confirm the connected device is PoE compatible. Check the PoE status LED for the port. Ensure the switch's PoE budget is not exceeded.
- **Slow Network Performance:** Check for network loops, excessive broadcast traffic, or duplex mismatches. Verify cable integrity.

5.2 LED Indicators

The switch features various LED indicators on the front panel to provide status information:

- **System LED:** Indicates overall switch status (e.g., power on, self-test, operational).
- **Port Link/Activity LEDs:** Indicate link status and data activity for each port.
- **PoE Status LEDs:** Indicate PoE power delivery status for PoE-enabled ports.
- Refer to the official HP documentation for a detailed explanation of each LED's behavior.

6. SPECIFICATIONS

Feature	Detail
Model Number	J9729A
Brand	HP

Feature	Detail
Total Network Ports	48 RJ45 Gigabit Ethernet (with PoE+), 4 SFP (combo), 2 SFP+ (10 Gigabit uplink)
Layer Supported	4
Data Transfer Rate	176 Gigabits Per Second (Switching Capacity)
RAM	512 MB
Flash Memory Size	1024 MB
Item Weight	13 pounds (5.9 kg)
Product Dimensions (LxWxH)	13 x 2 x 18 inches (33 x 5.1 x 45.7 cm)
Voltage	240 Volts (AC Input)
Interface Type	PoE, RJ45, SFP, SFP+
Case Material	Metal
Compatible Devices	Desktop, Laptop, Printer, IP Phones, Wireless Access Points

7. WARRANTY AND SUPPORT

The HPE 2920-48G-PoE+ Switch (J9729A) typically includes a free lifetime warranty and free software updates from the manufacturer. However, it is important to note that warranty coverage may depend on purchasing the product from an authorized reseller. Please consult HP's official warranty policy for full details.

For further support, visit the official [HP Store on Amazon](#) or the main HP support website.

