**ARUBA R8N87A**

# Aruba 6000 24G Class4 PoE 4SFP 370W Switch User Manual

Model: R8N87A

## 1. Introduction

This manual provides essential instructions for the installation, operation, maintenance, and troubleshooting of the Aruba 6000 24G Class4 PoE 4SFP 370W Switch. This device is designed to provide robust and flexible network connectivity, offering easy access to network configuration state information, REST APIs for fine-grained programmability, and a micro-services architecture for integration with other workflow systems.

### Key Features

- 24 networking ports to meet the requirements of demanding workgroups.
- Enables convenient connection of different networks for improved infrastructure flexibility.
- Supports cost-efficient twisted pair cables for high-speed data transfer up to 100 meters.
- Gigabit Ethernet ports for ultra-fast network speeds.
- Can function as a Layer 3 routing device for scalable network design.
- Management capability allows maximum efficiency and unrestricted control.
- Built-in power supply ensures all components receive accurate voltage.
- Rack mounting enables organized wiring and secure cable management for professional installation.

*Figure 1: Front view of the Aruba 6000 24G Class4 PoE 4SFP 370W Switch, showing 24 Ethernet ports and 4 SFP ports.*

# 2. Setup

## 2.1 Package Contents

Verify that the following items are included in your package:

- Aruba 6000 24G Class4 PoE 4SFP 370W Switch (Model R8N87A)
- Power Cord
- Rack Mount Kit (if applicable)
- Documentation (e.g., Quick Start Guide, Safety and Regulatory Information)

## 2.2 Physical Installation

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

### Desktop Installation

1. Place the switch on a flat, stable surface.
2. Ensure adequate ventilation around the device. Do not block ventilation openings.

### Rack Mounting

1. Attach the provided rack-mount brackets to the sides of the switch using the included screws.
2. Secure the switch into a standard 19-inch equipment rack using appropriate rack screws.
3. Ensure proper airflow within the rack to prevent overheating.

## 2.3 Connecting to Power

1. Connect one end of the power cord to the AC power inlet on the rear panel of the switch.
2. Connect the other end of the power cord to a grounded electrical outlet.
3. The switch will power on automatically. Observe the power LED indicator for status.

## 2.4 Network Connections

1. **Ethernet Ports:** Connect network devices (computers, servers, access points) to the 24 RJ45 Ethernet ports using standard Ethernet cables. The switch supports Gigabit Ethernet speeds.
2. **PoE (Power over Ethernet) Ports:** The Class4 PoE ports can provide power to compatible devices such as IP phones, wireless access points, and IP cameras. Ensure connected devices are PoE-compatible.
3. **SFP Ports:** Use the 4 SFP ports for fiber optic connections to other network devices or for uplink connections to a core switch. Insert compatible SFP transceivers into these slots.

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# 3. Operating Instructions

## 3.1 Basic Operation

Once powered on and connected, the switch begins forwarding network traffic automatically. The LEDs on the front panel indicate the status of each port and the overall device.

- **Power LED:** Indicates the power status of the switch.
- **Port Link/Activity LEDs:** Indicate link status (solid green for link) and network activity (flashing green).

- **PoE Status LEDs:** Indicate PoE power delivery status for respective ports.

### 3.2 Management Interface Access

The Aruba 6000 switch can be managed via a web-based graphical user interface (GUI), Command Line Interface (CLI) via console port or SSH, and SNMP.

#### Web GUI Access

1. Connect a computer to any Ethernet port on the switch.
2. Configure your computer's IP address to be in the same subnet as the switch's default IP address (refer to the Quick Start Guide for default IP).
3. Open a web browser and enter the switch's IP address.
4. Log in using the default credentials (refer to documentation for default username and password).

#### CLI Access (Console/SSH)

- **Console Port:** Connect a console cable (RJ45-to-DB9) from your computer's serial port to the console port on the switch. Use a terminal emulation program (e.g., PuTTY) with appropriate serial settings.
- **SSH:** Once the switch has an IP address and SSH is enabled, you can connect via an SSH client from a network-connected computer.

### 3.3 Monitoring Status

Regularly monitor the switch's status through the management interface or by observing the front panel LEDs to ensure optimal network performance and identify potential issues.

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## 4. Maintenance

### 4.1 Firmware Updates

Periodically check the Aruba support website for the latest firmware updates. Keeping the firmware up-to-date ensures optimal performance, security, and access to new features.

1. Download the latest firmware from the official Aruba support portal.
2. Follow the instructions provided with the firmware package for the update process, typically performed via the web GUI or CLI.
3. ***Caution:*** *Do not power off the device during a firmware update.*

### 4.2 Cleaning

To maintain proper ventilation and prevent dust buildup:

- Ensure the switch is powered off and disconnected from the power source before cleaning.
- Use a soft, dry cloth to wipe the exterior of the switch.
- Use compressed air to clear dust from ventilation openings.
- Do not use liquid or aerosol cleaners.

### 4.3 Environmental Considerations

Operate the switch within the recommended environmental specifications to ensure longevity and reliable performance.

- **Temperature:** Maintain ambient temperature within the specified operating range (e.g., 0°C to 45°C). The upper temperature rating is 60 Degrees Celsius.
- **Humidity:** Avoid excessively humid environments.
- **Ventilation:** Ensure unobstructed airflow around the switch.

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## 5. Troubleshooting

This section provides solutions to common issues you might encounter.

### 5.1 No Power

- **Check Power Cord:** Ensure the power cord is securely connected to both the switch and the electrical outlet.
- **Verify Outlet:** Test the electrical outlet with another device to confirm it is functional.
- **Power Supply:** If the power LED remains off after verifying connections and outlet, the internal power supply may be faulty. Contact support.

### 5.2 No Link on Port

- **Check Cable:** Ensure the Ethernet cable is properly connected at both ends. Try a different cable.
- **Verify Device:** Confirm the connected device (e.g., computer, server) is powered on and functioning correctly.
- **Port Status:** Check the port's status via the web GUI or CLI to see if it's administratively down or experiencing errors.
- **SFP Transceiver:** For SFP ports, ensure the transceiver is correctly seated and compatible.

### 5.3 PoE Device Not Powering On

- **PoE Compatibility:** Verify that the connected device is PoE-compatible and meets the Class4 PoE requirements.
- **PoE Budget:** Check the switch's PoE power budget. If too many high-power PoE devices are connected, the switch may not be able to power additional devices.
- **Cable Length/Quality:** Ensure the Ethernet cable is of good quality and within the maximum recommended length for PoE.

### 5.4 Cannot Access Management Interface

- **IP Address:** Verify the switch's IP address and ensure your computer is in the same subnet.
- **Network Connectivity:** Ensure there is a physical link between your computer and the switch.
- **Firewall:** Check if any firewall on your computer or network is blocking access to the switch's management ports (HTTP/HTTPS, SSH).
- **Default Credentials:** If you forgot the password, you may need to perform a factory reset (refer to advanced documentation or support).

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## 6. Specifications

| Feature | Detail |
|---|---|
| Brand | ARUBA |
| Model Number | R8N87A |
| Number of Ports | 24 (Gigabit Ethernet) + 4 (SFP) |
| Switch Type | Layer 2 Gigabit Ethernet Switch (with Layer 3 routing capability) |
| PoE Support | Class4 PoE, 370W total power budget |
| Data Transfer Rate | Up to 56 Gigabits Per Second (switching capacity) |
| Interface | RJ45, Uplink Port (SFP) |
| Dimensions (L x W x H) | 17.32"L x 10.55"W x 1.73"H |
| Item Weight | 3.5 Kilograms |
| Maximum Power Consumption | 32.7 Watts (excluding PoE load) |
| Upper Temperature Rating | 60 Degrees Celsius |
| Manufacturer | Hewlett Packard Enterprise |

## 7. Warranty Information

Warranty information for the Aruba 6000 24G Class4 PoE 4SFP 370W Switch is not explicitly provided in the product details. Please refer to the official Aruba website or contact your vendor for detailed warranty terms and conditions.

## 8. Support

For technical assistance, product documentation, or further inquiries, please visit the official Aruba support website or contact their customer service.

- **Aruba Official Website:** www.arubanetworks.com
- **Support Portal:** Refer to the website for specific support contacts and resources.