APC AP7921

APC AP7921 Switched Rack PDU User Manual

Model: AP7921

1. INTRODUCTION AND OVERVIEW

The APC AP7921 is a Switched Rack Power Distribution Unit (PDU) designed for efficient power management in rack environments. This 1U horizontal mounting PDU provides eight (8) C13 output receptacles and accepts a 208V-230V input via an IEC-320 C20 connector, supporting a 16A single-phase load. It offers advanced features such as remote individual outlet control, local current monitoring, and remote management capabilities, making it suitable for critical IT infrastructure.

Figure 1.1: Front view of the APC AP7921 Switched Rack PDU, showing the eight C13 output receptacles and the local current monitoring display.

Key Features:

- **1U Horizontal Mounting:** Designed for easy integration into standard server racks.
- **Switched Outlets:** Remote individual control of eight (8) C13 output receptacles.
- **Input Power:** IEC-320 C20 connector for 208V-230V, 16A single-phase input (3.3 kW).
- **Local Current Monitoring:** Integrated display for real-time current monitoring.
- **Remote Management:** Capabilities for remote current monitoring, outlet control, and configuration.
- **Flash Upgradeable:** Supports firmware updates for enhanced functionality.

- **Alarm Thresholds:** Configurable thresholds for power events.
- **Power Delays:** Sequential power-up/down capabilities for connected equipment.

2. SAFETY INFORMATION

Read and understand all instructions before installing or operating this equipment. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- This PDU is intended for indoor use only.
- Connect the PDU to a properly grounded power source.
- Do not attempt to open or service the PDU. There are no user-serviceable parts inside.
- Ensure that the total current draw of connected equipment does not exceed the PDU's maximum rated current (16A).
- Use only appropriate power cords for connecting devices to the PDU outlets.
- Keep liquids away from the PDU.

3. PACKAGE CONTENTS

Verify that all components are present upon unpacking. If any items are missing or damaged, contact your vendor or APC support.

- APC AP7921 Switched Rack PDU
- Rack mounting hardware (brackets, screws)
- Documentation (Quick Start Guide, Safety Information)
- Serial configuration cable (if applicable)

4. SETUP AND INSTALLATION

4.1 Rack Mounting

1. Identify a 1U (1.75 inches) space in your standard 19-inch server rack.
2. Attach the provided mounting brackets to the sides of the PDU using the included screws.
3. Secure the PDU into the rack using appropriate rack screws, ensuring it is firmly seated.

4.2 Power Connection

1. Connect the IEC-320 C20 input connector of the PDU to a compatible 208V-230V, 16A power source. Ensure the power source is properly grounded and capable of supplying the required current.
2. Connect your IT equipment's power cords to the eight (8) C13 output receptacles on the PDU. Distribute the load evenly across the outlets if possible.

5. OPERATION

5.1 Powering On

Once the PDU is connected to a power source, it will power on automatically. The local current monitoring display will illuminate, showing the total current draw.

5.2 Local Current Monitoring

The integrated display on the front panel provides real-time information on the total current being drawn by all connected devices. This helps in preventing overloads and managing power capacity.

5.3 Remote Individual Outlet Control

The AP7921 allows for remote control of each individual C13 outlet. This feature enables users to power cycle, turn on, or turn off connected equipment remotely, which is beneficial for troubleshooting or managing power to specific devices without physical access.

5.4 Power Delays

The PDU supports configurable power-on and power-off delays for its outlets. This feature helps in sequencing the startup of equipment to prevent inrush current overloads and manage system dependencies.

6. CONFIGURATION

The AP7921 PDU offers various configuration options through its network interface for remote management.

6.1 Network Access

Connect the PDU to your network using an Ethernet cable. Access the PDU's web interface via its assigned IP address to configure settings, monitor status, and control outlets. Refer to the network configuration guide for initial setup.

6.2 Alarm Thresholds

Configure alarm thresholds for current draw. The PDU can send alerts via email or SNMP traps if the current exceeds or falls below specified limits, helping to prevent overloads or identify power issues.

6.3 Firmware Updates

The PDU's firmware is flash upgradeable. Regularly check the APC website for the latest firmware versions to ensure optimal performance and access to new features. Follow the provided instructions for firmware upgrade procedures.

7. MAINTENANCE

7.1 Cleaning

Periodically clean the exterior of the PDU with a soft, dry cloth. Do not use liquid cleaners or solvents. Ensure the PDU is disconnected from the power source before cleaning.

7.2 Environmental Considerations

Ensure the PDU operates within its specified temperature and humidity ranges. Maintain proper airflow around the unit to prevent overheating.

8. TROUBLESHOOTING

8.1 No Power to Outlets

- Verify the input power cable is securely connected to both the PDU and the power source.
- Check the circuit breaker on the PDU (if present) and the upstream circuit breaker.
- Ensure individual outlets are not remotely switched off.

8.2 Overload Indication

- If the local display or remote interface indicates an overload, immediately disconnect non-essential equipment.
- Reduce the total load to below the PDU's maximum rated current (16A).
- Check for short circuits in connected equipment.

8.3 Remote Access Issues

- Verify network cable connection and network status.

- Confirm the PDU's IP address and network settings.
- Ensure firewall rules are not blocking access to the PDU's management interface.

9. SPECIFICATIONS

Feature	Specification
Model Number	AP7921
Input Voltage	208V-230V
Input Current	16A
Input Connector	IEC-320 C20
Output Receptacles	8 x IEC-320 C13
Form Factor	1U Horizontal Rack-Mountable
Product Dimensions (H x W x D)	2.7 x 18.5 x 13.5 inches (approx.)
Item Weight	1.54 pounds
Cord Length	7.8 inches
Special Feature	Mountable, Switched Outlets, Remote Management
Manufacturer	APC

10. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the official APC website or contact your local APC representative. Ensure you have your product model number (AP7921) and serial number available when contacting support.

Online Resources: Visit www.apc.com for product documentation, software downloads, and support contact information.