Synaccess SP-2001D

Synaccess SP-2001D SynLink Monitored 2U PDU Instruction Manual

Model: SP-2001D

1. Product Overview

The Synaccess SP-2001D SynLink Monitored 2U PDU is a robust power distribution unit designed for reliable power management and remote monitoring in data centers and server racks. This non-switchable PDU operates at 250VAC/20A and features 16 outlets, comprising 12 IEC-320 C13 and 4 IEC-320 C19 receptacles. It provides advanced energy metering capabilities and supports various network protocols for comprehensive remote access and control.

Key Features:

- **Non-Switchable Outlets:** Provides continuous power to connected equipment.
- **Dual Energy Meters:** Two dedicated meters monitor outlets #1-8 and #9-16, providing KWH, Watts, VA, Amps, Volts, Hz, and Power Factor data.
- **Remote Access:** Access and manage the PDU via Web App, SSH, Serial, and HTTP(S) API.
- **Network Protocol Support:** Compatible with SSH, SNMP, HTTP(s), Telnet, Serial, Syslog, DHCP, NTP, SMTP/Email, and Ping.
- **Automation and Alerts:** Configure custom actions and email notifications based on measured power thresholds.
- **Certifications:** UL62368-1 certified for safety and compliance.

Front view of the Synaccess SP-2001D PDU, showing the display panel and various ports.

2. Setup and Installation

2.1 Package Contents

- Synaccess SP-2001D SynLink Monitored 2U PDU
- 1x NEMA5-15P to C19 power cord
- 2x Mounting brackets for 19" server rack
- Mounting screws

2.2 Physical Installation

1. Attach the included mounting brackets to the sides of the PDU using the provided screws.
2. Securely mount the PDU into a standard 19-inch server rack using appropriate rack screws (not included). Ensure adequate airflow around the unit.

2.3 Power Connection

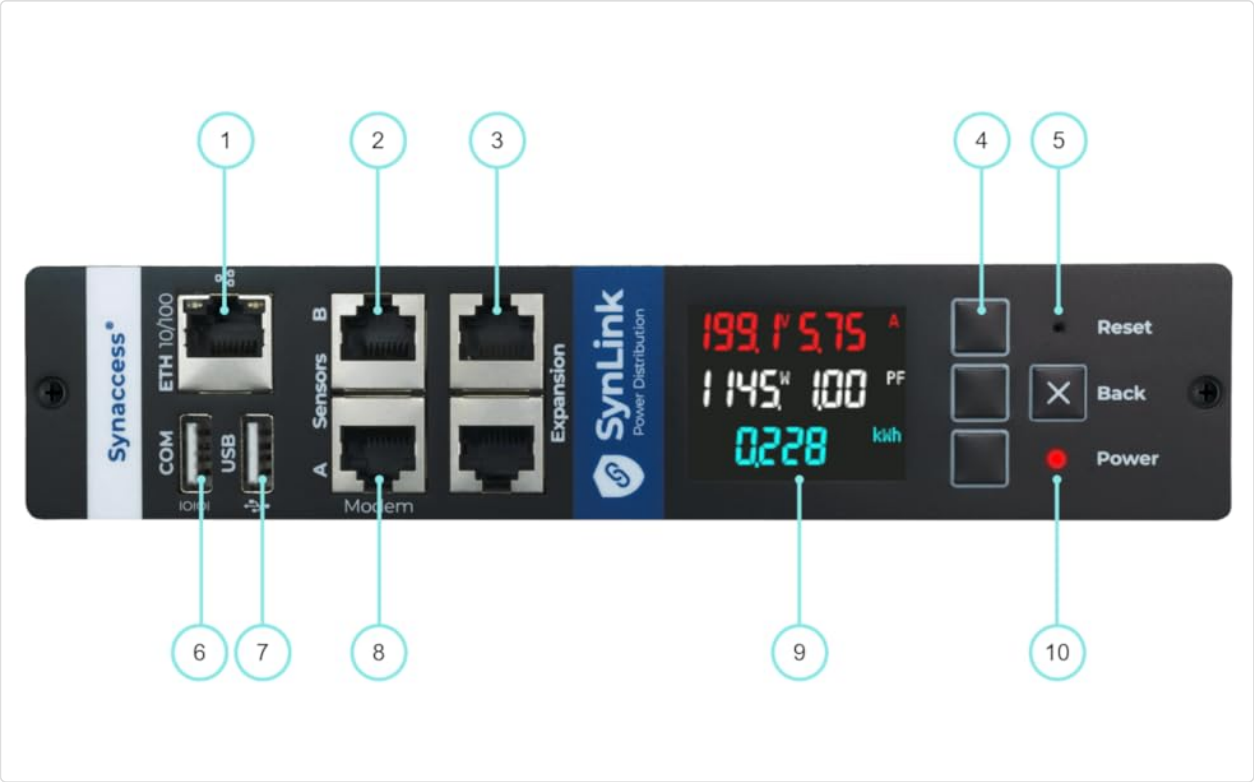
1. Connect the provided NEMA5-15P to C19 power cord to the PDU's C20 inlet.
2. Plug the NEMA5-15P end of the power cord into a compatible 250V/20A power source. Verify that the power source meets the PDU's electrical requirements.

2.4 Device Connection

1. Connect your IT equipment and other devices to the available IEC-320 C13 (12 outlets) and IEC-320 C19 (4 outlets) receptacles on the PDU.
2. Ensure that the total power draw of all connected devices does not exceed the PDU's maximum capacity of 20A.

2.5 Network Connection

1. Connect an Ethernet cable from your network switch or router to the ETH 10/100 port on the front panel of the PDU.
2. The PDU will typically obtain an IP address via DHCP. Refer to the network configuration section for static IP setup if required.



Detailed view of the Synaccess SP-2001D PDU front panel with numbered components for identification.

1. **ETH 10/100:** Ethernet port for network connectivity.
2. **Sensors A/B:** Ports for connecting external environmental sensors.
3. **Expansion:** Ports for connecting expansion modules.
4. **Navigation Buttons:** Up/Down buttons for menu navigation.
5. **Reset Button:** Resets the PDU.
6. **COM Port:** Serial communication port.
7. **USB Ports:** For firmware updates or other peripherals.
8. **Modem Port:** For modem connectivity.
9. **LCD Display:** Shows real-time power metrics and menu options.
10. **Power Button/Indicator:** Controls power and indicates status.

3. Operating Instructions

3.1 Initial Access

Once the PDU is powered on and connected to the network, you can access its management interface:

- **Web Interface:** Open a web browser and enter the PDU's IP address. Log in with the default credentials (refer to the product documentation for specifics).
- **SSH/Telnet:** Use an SSH or Telnet client to connect to the PDU's IP address for command-line access.
- **Serial:** Connect a serial cable to the COM port and use a terminal emulator for direct access.

3.2 Energy Monitoring

The PDU provides detailed energy metrics through its web interface and API. The LCD display on the front panel also shows real-time data.

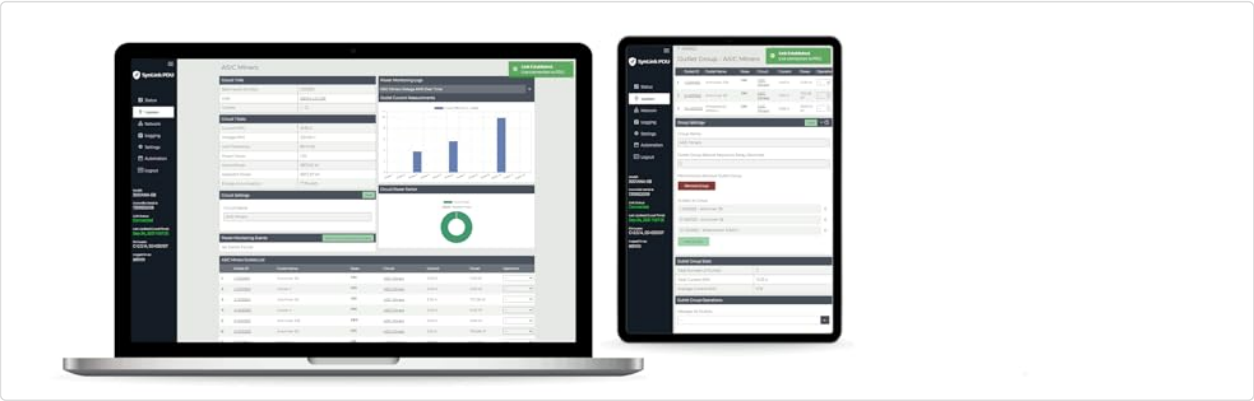
- **Metrics:** Monitor Kilowatt-hours (KWH), Watts, Volt-Amperes (VA), Amps, Volts, Hertz (Hz), and Power Factor (PF).
- **Group Monitoring:** Energy meters are dedicated to two groups of outlets: #1-8 and #9-16.

- **HTTP(S) REST API:** Utilize the API for programmatic access to inlet-level energy monitoring reports.

3.3 Configuration and Automation

The web interface allows for comprehensive configuration of network settings, user accounts, and automation features.

- **Network Settings:** Configure static IP addresses, DNS, and other network parameters.
- **Email Alerts:** Set up an SMTP server and define thresholds for power metrics (e.g., overcurrent, undervoltage) to trigger email notifications.
- **Automation:** Create custom actions and alerts based on various conditions, enhancing proactive management.



Screenshot of the SynLink web interface, demonstrating monitoring and configuration options on a laptop and tablet.

4. Maintenance

4.1 Cleaning

- Ensure the PDU is powered off and disconnected from the power source before cleaning.
- Use a soft, dry cloth to wipe the exterior of the unit. Avoid using liquid cleaners or abrasive materials.
- Keep ventilation openings clear of dust and debris to ensure proper cooling.

4.2 Firmware Updates

Periodically check the Synaccess website for firmware updates. Keeping the firmware current ensures optimal performance, security, and access to new features. Follow the instructions provided with the firmware update package for proper installation.

4.3 Environmental Considerations

Operate the PDU within its specified environmental conditions (temperature, humidity) to ensure longevity and reliable operation. Avoid exposing the unit to excessive heat, moisture, or dust.

5. Troubleshooting

This section provides basic troubleshooting steps. For more detailed information, refer to the comprehensive documentation available on the Synaccess support website.

5.1 No Power to PDU

- Verify that the power cord is securely connected to both the PDU and the power source.
- Check the circuit breaker for the power source to ensure it has not tripped.

- Confirm the power source is active and providing the correct voltage (250V).

5.2 Cannot Access Web Interface

- Ensure the Ethernet cable is properly connected to the PDU's ETH 10/100 port and the network.
- Verify that the PDU has an IP address. Check the LCD display for network information.
- Ping the PDU's IP address from your computer to confirm network connectivity.
- Clear your browser's cache or try a different browser.
- Confirm that your computer is on the same network segment as the PDU or that routing is correctly configured.

5.3 Incorrect Energy Readings

- Ensure all connected devices are drawing power within the PDU's operational limits.
- Verify that the PDU's firmware is up to date.
- If discrepancies persist, contact Synaccess support.

6. Specifications

Feature	Specification
Model Number	SP-2001D
Input Voltage	250VAC
Amperage	20 Amps
Outlets	16 (12x IEC-320 C13, 4x IEC-320 C19)
Form Factor	2U Rackmount
Product Dimensions	17 x 4.31 x 1.75 inches
Item Weight	4.5 pounds
Energy Monitoring	KWH, Watts, VA, Amps, Volts, Hz, PF (per 8-outlet group)
Network Protocols	SSH, SNMP, HTTP(s), Telnet, Serial, Syslog, DHCP, NTP, SMTP/Email, Ping
Certifications	UL62368-1, NEMA
Compatible Devices	All (within power limits)

TÜV Rheinland certification logo, indicating product safety and quality compliance.

7. Warranty Information

The Synaccess SP-2001D SynLink Monitored 2U PDU comes with a**3-year standard warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. For detailed terms and conditions, please refer to the official Synaccess warranty policy available on their website.

8. Support

For technical assistance, additional documentation, or to report issues, please visit the official Synaccess support website or contact their customer service department. Up-to-date documentation, FAQs, and how-to guides are available to assist with integration and programmability.

Online Resources: Synaccess Amazon Store