

## Liebert PSA5-1500MT120

# Vertiv Liebert PSA5 UPS - 1500VA/900W User Manual

Model: PSA5-1500MT120

Brand: Liebert

## INTRODUCTION

The Vertiv Liebert PSA5 UPS (Uninterruptible Power Supply) provides reliable and cost-effective power protection for your electronic devices. This line-interactive UPS features Automatic Voltage Regulation (AVR) to extend battery life and offers battery backup with surge protection. It is designed to safeguard against power surges, brownouts, blackouts, and voltage drops, ensuring the continuous operation and safe shutdown of your critical equipment.

## PRODUCT OVERVIEW

The Vertiv Liebert PSA5-1500MT120 UPS is equipped with multiple features to protect and manage your power supply:

- **Surge Protection and Battery Backup:** Provides protection against power fluctuations and outages, with AVR to extend battery life. USB communication allows for notifications and controlled shutdown via free software.
- **10 Outlets, 2 USB Charging Ports:** Includes 5 surge-only outlets and 5 battery-backed & surge-protected outlets. Two outlets are widely spaced for larger transformer-block plugs. Two USB charging ports are available for mobile devices.
- **LCD Display:** A clear LCD panel monitors real-time data such as run time, load capacity, battery status, and input/output voltage and frequency.
- **Energy Efficient:** This UPS is Energy Star certified, meeting eco-friendly requirements and contributing to cost savings.

- **Compact Tower Design:** The unit features a space-saving tower form factor suitable for various environments.

## Controls and Features Diagram



This image illustrates the key controls and features on the front and back panels of the Vertiv Liebert PSA5 UPS, including various ports and outlets.



The LCD display provides real-time information on input/output voltage and battery status.

## SETUP

1. **Unpacking:** Carefully remove the UPS unit and all accessories from the packaging.
2. **Initial Battery Connection:** For safety during shipping, the internal battery may be disconnected. Locate the battery compartment (typically accessible from the front or bottom) and connect the battery terminals as instructed in the included quick start guide. Ensure proper polarity (red to positive, black to negative).

3. **Placement:** Place the UPS in a well-ventilated area, away from direct sunlight, heat sources, and excessive moisture. Ensure adequate space around the unit for proper airflow.
4. **Power Connection:** Plug the UPS's power cord directly into a grounded wall outlet. Avoid using extension cords or surge protectors with the UPS input.
5. **Device Connection:**
  - Plug critical equipment (e.g., computers, modems, routers) into the **battery-backed & surge-protected outlets**.
  - Plug non-critical equipment (e.g., printers, scanners) into the **surge-only outlets**.
  - Use the **USB charging ports** on the front for mobile devices.
  - Connect the UPS to your computer via the **USB communication port** for monitoring and controlled shutdown features using Vertiv Power Assist software.
6. **Initial Charge:** Allow the UPS to charge for at least 8 hours before initial use to ensure full battery capacity.

## OPERATING INSTRUCTIONS

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- **Power On/Off:** Press and hold the power button on the front panel for a few seconds to turn the UPS on or off.
- **LCD Display:** The LCD panel provides real-time information. Use the display buttons to cycle through different metrics such as input/output voltage, load capacity, battery charge level, and estimated run time. The display may dim or turn off after a period of inactivity to save energy; press any display button to reactivate it.
- **Automatic Voltage Regulation (AVR):** The UPS automatically adjusts high and low voltages to safe levels without using battery power, preserving battery life for actual power outages.
- **Battery Backup Mode:** In the event of a power outage, the UPS will automatically switch to battery power. An audible alarm may sound, and the LCD will indicate battery mode.
- **USB Communication:** Connect the UPS to your computer using the provided USB cable. Download and install the Vertiv Power Assist software to enable advanced monitoring, controlled system shutdown during extended outages, and event notifications.
- **Eco Mode:** This energy-saving feature can automatically cut off power to idle devices, reducing energy consumption and lowering utility bills. Refer to the software manual for configuration.

## MAINTENANCE

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- **Battery Replacement:** The UPS is designed for user-replaceable batteries. When the battery reaches the end of its service life (typically 3-5 years, or indicated by an error code like "bad battery" or "F02"), replace it with a genuine Vertiv Liebert replacement battery. Disconnect the UPS from all power sources and connected devices before attempting battery replacement. Follow the instructions in the quick start guide or the full user manual for safe replacement.
- **Cleaning:** Regularly clean the exterior of the UPS with a dry cloth. Ensure ventilation openings are free from dust and debris to maintain proper airflow and prevent overheating.

- **Storage:** If storing the UPS for an extended period, ensure the battery is fully charged and then disconnect it. Recharge the battery every 3-6 months to prevent deep discharge and prolong its lifespan.

## TROUBLESHOOTING

If you encounter issues with your Vertiv Liebert PSA5 UPS, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
UPS does not turn on.	Battery disconnected or depleted.	Ensure the internal battery is properly connected. Plug the UPS into a wall outlet and allow it to charge for at least 8 hours.
Short runtime on battery.	Overloaded UPS, aging battery, or insufficient charge.	Reduce the connected load. Ensure the battery is fully charged. If the battery is old (over 3 years), consider replacement.
"Bad Battery" or "F02" error code.	Battery has failed or is severely degraded.	The battery requires replacement. Contact support or refer to the maintenance section for replacement instructions.
UPS beeps continuously in AC mode.	Overload condition.	Disconnect non-essential equipment from the UPS until the alarm stops.
No power to outlets.	UPS is off, circuit breaker tripped, or power outage.	Turn on the UPS. Check the circuit breaker on the back of the unit and reset if tripped. Verify utility power.

## SPECIFICATIONS

- **Model Number:** PSA5-1500MT120
- **Capacity:** 1500VA / 900W
- **Input Voltage:** 120 Volts
- **Battery Type:** Lead Acid (2 Product Specific batteries required)
- **Outlets:** 10 (5 battery-backed & surge-protected, 5 surge-only)
- **USB Charging Ports:** 2
- **Communication Ports:** USB Type A to USB Type B, 2 meter (H77 ft) in length
- **Dimensions (D x W x H):** 16.2" x 3.9" x 11"
- **Item Weight:** 26.5 pounds
- **Color:** Black

- **Certifications:** Energy Star Certified

## WARRANTY AND SUPPORT

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The Vertiv Liebert PSA5 UPS is backed by a **3-year full unit coverage warranty**, which includes the battery, with advanced replacement. For technical support, warranty claims, or additional information, please refer to the official Liebert website or contact their customer service.