PowerUPS 200 Line Interactive Series

Installer/User Guide

1000 VA / 1600 VA UPS; 230 V; VRLA

The information contained in this document is subject to change without notice and may not be suitable for all applications. While every precaution has been taken to ensure the accuracy and completeness of this document, Vertiv assumes no responsibility and disclaims all liability for damages result from use of this information or for any errors or omissions.

Vertiv recommends installing a monitored fluid detection system that is wired to activate the automatic closure of field-installed coolant fluid supply and return shut off valves, where applicable, to reduce the amount of coolant fluid leakage and consequential equipment and building damage. Refer to local regulations and building codes relating to the application, installation, and operation of this product. The consulting engineer, installer, and/or end user is responsible for compliance with all applicable laws and regulations relation to the application, installation, and operation of this product.

The products covered by this instruction manual are manufactured and/or sold by Vertiv. This document is the property of Vertiv and contains confidential and proprietary information owned by Vertiv. Any copying, use, or disclosure of it without the written permission of Vertiv is strictly prohibited.

Names of companies and products are trademarks or registered trademarks of the respective companies. Any questions regarding usage of trademark names should be directed to the original manufacturer.

Technical Support Site

If you encounter any installation or operational issues with your product, check the pertinent section of this manual to see if the issue can be resolved by following outlined procedures.

Visit https://www.vertiv.com/en-us/support/ for additional assistance.

TABLE OF CONTENTS

1 Important Safety Information **1**
2 Product Description **3**
2.1 Available Models 3
2.2 Front and Rear Panel Controls and Features 4
3 Installation **7**
3.1 What's Included 7
3.2 Product Handling Guidelines 7
3.3 Unpacking and Inspection 7
3.4 Preparation for Installation 7
3.4.1 Installation Environment 7
3.4.2 Installation Clearances 7
3.5 Installing the UPS 8
3.5.1 Connecting Loads 8
3.5.2 Connecting for Network, Telephone or TV Protection 8
3.5.3 USB Communication Connection 8
3.5.4 USB Charging Ports 8
3.5.5 Connecting AC Input 8
4 Operation **9**
4.1 Modes of Operation 9
4.1.1 Off Mode 9
4.1.2 On/Normal Mode 9
4.1.3 On/Automatic Voltage Regulation (AVR) Mode 9
4.1.4 On/Battery Mode 9
4.1.5 Fault Mode 9
4.1.6 Battery Self Test Mode 9
4.2 Controls 10
4.3 Display Panel Indicators 11
4.4 Normal Startup 12
4.5 Normal Shutdown 12
4.6 Full Shutdown 12
5 Maintenance **13**
5.1 Precautions 13
5.2 Battery Charging 13
5.3 Battery Replacement 13
6 Troubleshooting **17**
6.1 Audible Alarm (Buzzer) 17
6.2 Warning Indicator 17

6.3 Faults 18
7 Specifications **19**
7.1 Battery Run Times 21
Appendices **23**
Appendix A: Technical Support and Contacts 23

1 Important Safety Information

IMPORTANT! This manual contains important safety instructions that must be followed during the installation and maintenance of the UPS and batteries. Read this manual thoroughly and the safety and regulatory information, available at https://www.vertiv.com/ComplianceRegulatoryInfo, before attempting to install, connect to supply, or operate this UPS.

This page intentionally left blank

2 Product Description

The Vertiv™ PowerUPS 200 Series is an economical, line interactive UPS designed with the features you need, providing reliable power protection for computers, workstations, retail point of sale (POS) equipment, wireless networks, and surveillance systems. Designed with controls for user friendly operation, the Vertiv™ PowerUPS 200 Series UPS delivers dependable power protection designed to meet your needs.

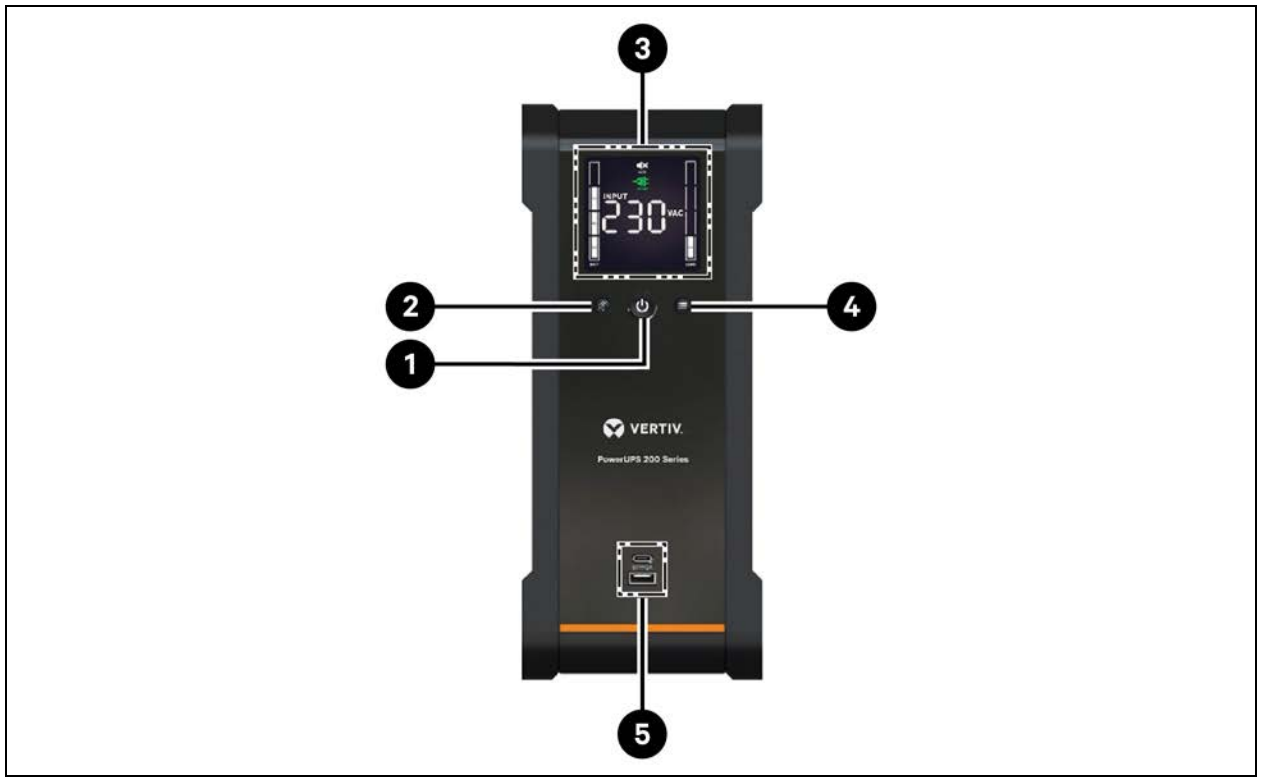
2.1 Available Models

Table 2.1 PowerUPS 200 Series Models

MODEL NUMBER	NOMINAL POWER RATING
PSA6-1000IT-IEC	1000 VA / 625 W
PSA6-1000IT-SCH	1000 VA / 625 W
PSA6-1600IT-IEC	1600 VA / 1000 W
PSA6-1600IT-SCH	1600 VA / 1000 W

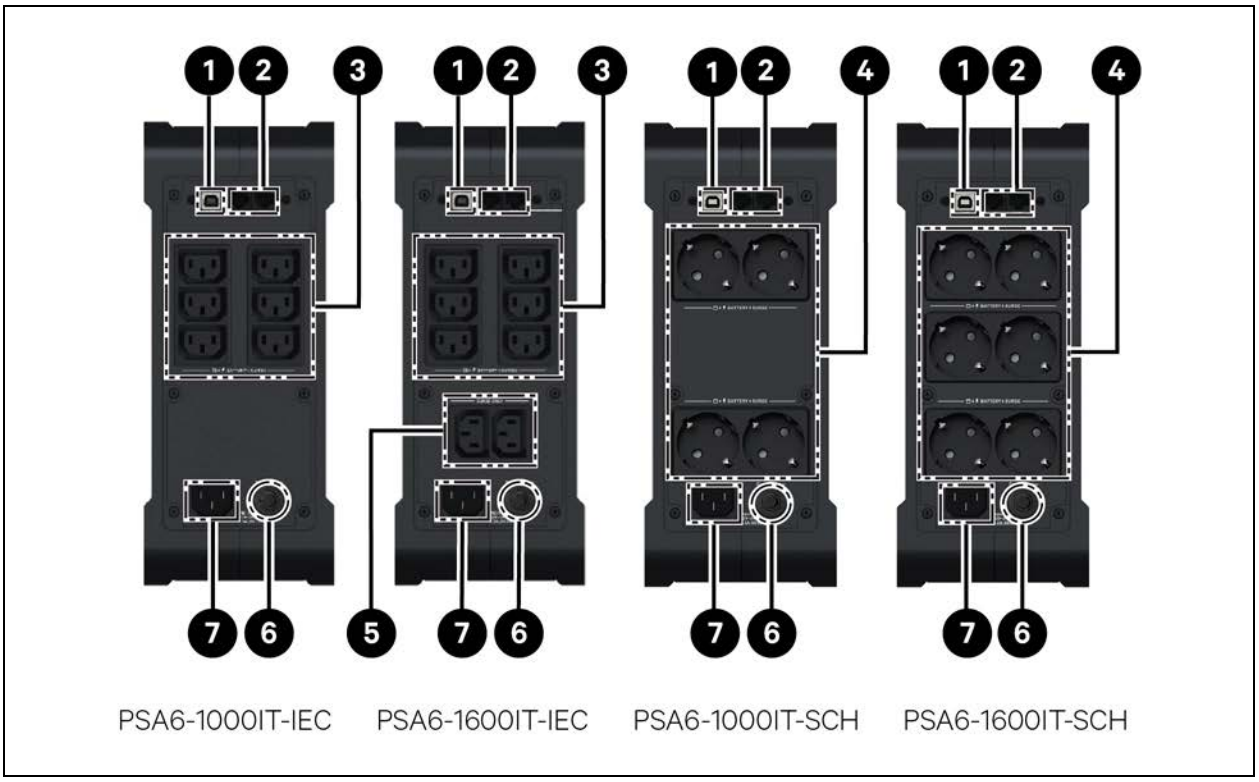
2.2 Front and Rear Panel Controls and Features

Figure 2.1 UPS Front Panel



Item	Description
1	Power button
2	Mute button
3	LCD display
4	LCD navigation button
5	USB charging ports 5 V / 2 A maximum (Type A and C)

Figure 2.2 UPS Rear Panel



Item	Description
1	USB communication port (Type B)
2	RJ45 connectors for network surge protection
3	Battery-backed and surge-protected receptacles (IEC)
4	Battery-backed and surge-protected receptacles (Schuko)
5	Surge-protected only receptacles (IEC)
6	Input circuit breaker
7	AC input socket

This page intentionally left blank

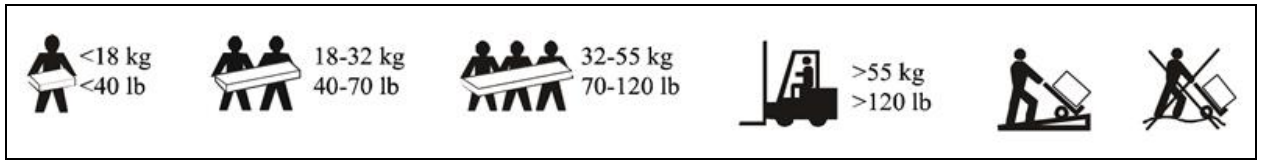
3 Installation

3.1 What's Included

- Vertiv™ PowerUPS 200 Series UPS
- Quick Installation Guide
- Safety and Regulatory Guide
- One USB cable: 1.2 m (4 ft)
- One Power cable: 1.8 m (6 ft)

3.2 Product Handling Guidelines

Figure 3.1 Product Handling Guidelines



3.3 Unpacking and Inspection

Unpack the UPS and conduct the following checks:

- Inspect the UPS for shipping damage. If any shipping damage is found, report it to the carrier and your local dealer or your Vertiv representative immediately.
- Check the accessories included in the packaging list. If there is any discrepancy, contact your local dealer or your Vertiv representative immediately.

3.4 Preparation for Installation

3.4.1 Installation Environment

- Install the UPS indoors in a controlled environment, where it cannot be accidentally turned Off. The installation environment should meet the specifications listed in Specifications on page 19.
- Place it in an area of unrestricted air flow around the unit, away from water, flammable liquids, gases, corrosives, and conductive contaminants. Avoid direct sunlight.
- The mains socket outlet that supplies the UPS should be near the UPS and easily accessible.

NOTE: Operating the UPS in temperatures above 77°F (25°C) reduces battery life.

3.4.2 Installation Clearances

Maintain at least 4 in. (100 mm) clearance around all sides of the UPS. Do not obstruct the air inlets on both sides of the UPS. Blocking the air inlets reduces ventilation and heat dissipation, shortening the service life of the UPS.

3.5 Installing the UPS

3.5.1 Connecting Loads

All UPS outlet receptacles have surge protection and battery backup. The 1600 VA IEC model has an additional 2 surge protected only outlets. Plug your critical equipment (such as computer, monitors, printers and other peripherals etc.) into the outlet receptacles. Note that the load should not exceed the output load rating of the UPS.

3.5.2 Connecting for Network, Telephone or TV Protection

All Vertiv™ PowerUPS 200 Series models feature a separate RJ45 port on the rear panel for network/telephone surge protection. Connect the IN port to the line from the wall jack and the OUT port to your device port. Use of this port is optional and does not interfere with the normal operation of the UPS.

3.5.3 USB Communication Connection

User can connect the Vertiv™ PowerUPS 200 Series UPS to a computer via USB allowing unattended, controlled shutdown of your computer in case of UPS input power failure. The UPS works with the computer running software built-in within the Microsoft Windows operating system. To use this feature, plug the provided USB cable into USB Type B port located on the rear panel of the UPS and the other end into an open USB port on your computer. Use of this port is optional and does not interfere with the normal operation of the UPS. Direct monitoring of the UPS and unattended controlled shutdown of your computer in case of a power failure can also be done using the Vertiv Power Assist software via the USB port. See Section UPS Management Software (Optional) below for more information.

UPS Management Software (Optional)

Vertiv™ PowerUPS 200 Series UPS is compatible with Vertiv Power Assist UPS management software. Vertiv Power Assist is an easy to use UPS management and shutdown software package which connects locally to the UPS via the USB port. Visit http://www.vertiv.com/powerassist for a free download of the software and additional information.

3.5.4 USB Charging Ports

Vertiv™ PowerUPS 200 Series UPS has easily accessible, front panel USB Type A and Type C charging ports. These ports charge phones or other small USB powered devices. The ports provide up to 2 A of charge total shared dynamically between both ports. You may plug devices into these ports at any time during installation and operation.

NOTE: Charging is only available when the UPS is in an ON mode.

3.5.5 Connecting AC Input

Ensure that all the loads are first powered off. Connect to an input power supply/wall outlet that is properly protected by a circuit breaker in accordance with national and local electrical codes. The input receptacle must be grounded. See 19, for input cord rating.

Once the UPS is plugged into the wall outlet, it begins charging the battery.

NOTE: While every precaution has been taken to ensure that the battery is in good condition, we recommend allowing the UPS to be plugged into AC input and to charge the battery for at least 24 hours prior to providing full back-up time protection for any utility power abnormality.

4 Operation

4.1 Modes of Operation

NOTE: In all the following modes:
The UPS always provides surge protection and input breaker protection to all the outlets.
The outlets are voltage regulated and always have the same voltage level as the UPS mode voltage (±10%).
The surge-only outlets are not voltage regulated, battery backed-up or switched by the UPS.

4.1.1 Off Mode

The UPS input is plugged into a stable, 230 VAC source, but the battery-backed outlets are turned off. The internal batteries are charging.

4.1.2 On/Normal Mode

The UPS input is plugged into a stable, 230 VAC source, and the outlets are turned on. The internal batteries are charging.

4.1.3 On/Automatic Voltage Regulation (AVR) Mode

The UPS input is plugged in, but the voltage source is abnormally low (brownout, sag and undervoltage) or abnormally high (swell and overvoltage). The UPS automatically corrects the low or high voltage and allows the outlets to be on with the normal, expected voltage. The internal batteries are charging.

NOTE: The surge-only outlets will have the abnormally low input voltage and equipment plugged into these outlets may not work.

4.1.4 On/Battery Mode

When the voltage source has become extremely low or high and unusable. The UPS will automatically switch to the internal battery to provide normal, useable voltage to the outlets.

NOTE: The surge-only outlets will not have power.

4.1.5 Fault Mode

An error or fault condition has occurred. The outlets are shut off and the internal batteries are not charging.

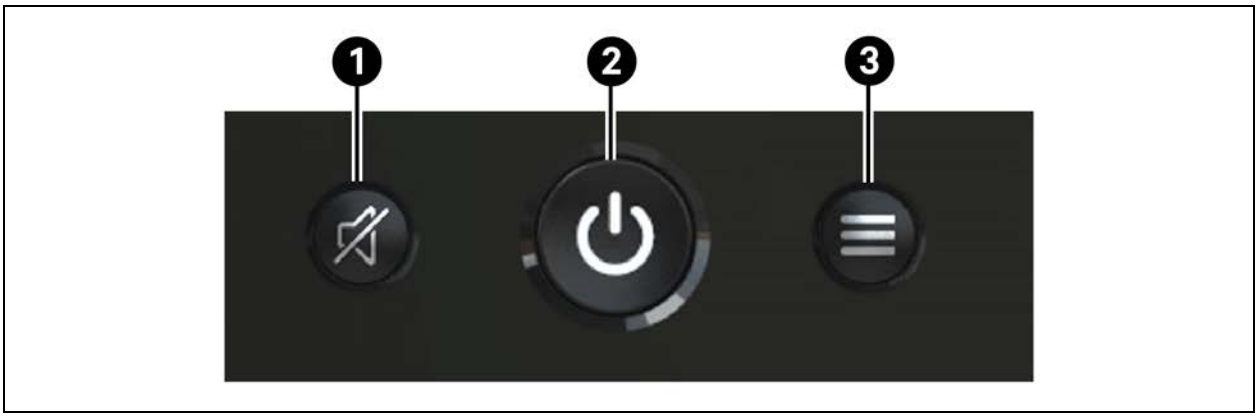
NOTE: The surge-only outlets may still have power if the UPS input is plugged in.

4.1.6 Battery Self Test Mode

The battery self test mode occurs at startup when the UPS is powered on. The UPS enters a cycle of approximately 10 seconds during which it tests the internal battery. The outlets are still temporarily powered by the internal battery.

4.2 Controls

Figure 4.1 Buttons and Indicator on the Front Panel

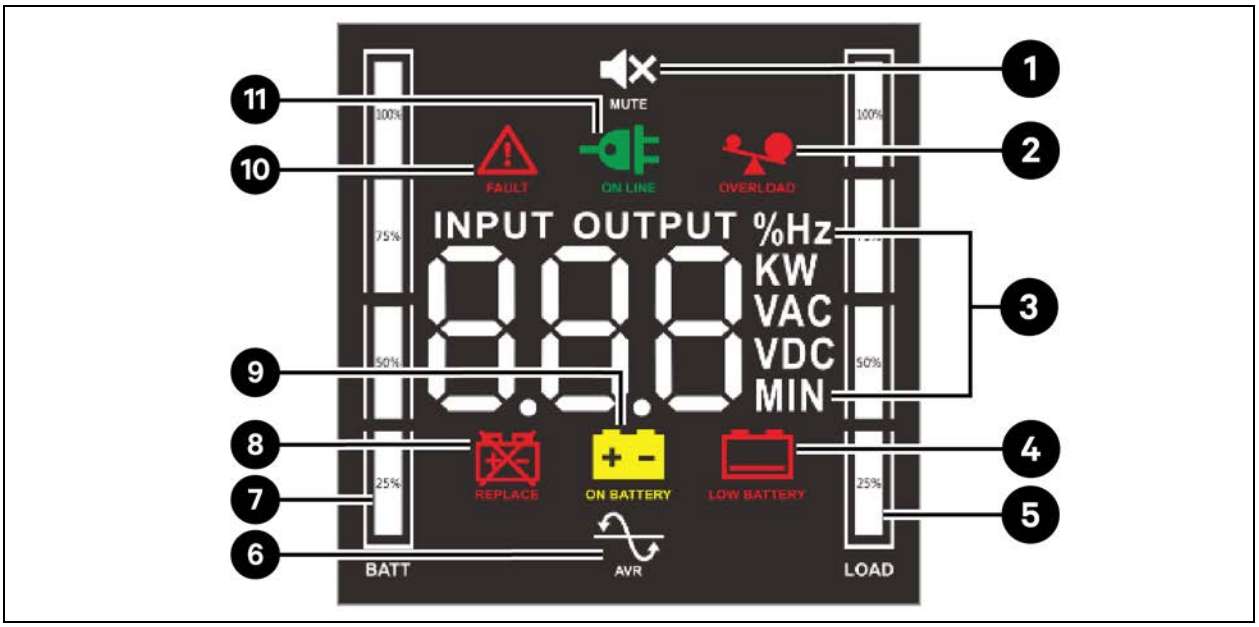


Item	Description
1	Mute button • Press and hold for 1 second during On/Battery mode to mute or unmute an alarm beep. • Press and hold for 4 seconds to cycle between voltage mode selection in off charging mode. • Press this button quickly to wake the LCD display.
2	Power button • Press and hold for 1 second to cycle between *On* and *Off* mode. • Press this button quickly to wake the LCD display.
3	LCD navigation button • Press this button to cycle through UPS status/operating parameters (displayed on the LCD). • Press this button quickly to wake the LCD display.

4.3 Display Panel Indicators

NOTE: The display automatically powers off to conserve power. However, the remains on when there is a warning or fault to call attention to the event.

Figure 4.2 LCD Display



Item	Description
1	Mute • Illuminated when alarm is muted.
2	Output Overload • Flashing indicates output overload warning. See Warning Indicator on page 17, for more details.
3	Numeric display shows the UPS operational parameters: • Hz: Input/output frequency • KW: Output power • VAC: Input/output voltage • VDC: Battery voltage • MIN: Estimated battery backup time
4	Low Battery Warning • Flashing indicates low battery condition. See Warning Indicator on page 17, for more details.
5	Load Status • Output load level displayed in 25% increments.
6	AVR • Flashing indicates Automatic Voltage Regulation mode.
7	Battery Status • Battery capacity displayed in 25% increments.

Item	Description
8	Battery Replace • Flashing indicates that the battery must be replaced. See Warning Indicator on page 17, for more details.
9	Battery Operation • Illuminated when operating on battery power.
10	Fault Indicators—When illuminated, indicates the following fault codes: • E01 • E02 • E03 • E04 • E05 • E06 See Faults on page 18, for more details.
11	AC Line Mode • On solid: Normal mode

4.4 Normal Startup

With the UPS connected to AC input, press and hold the power button for 1 second.

4.5 Normal Shutdown

1. Press and hold the power button for 1 second. The outlets are turned off.
2. Disconnect AC input power.

4.6 Full Shutdown

1. Press and hold the power button for 1 second. The outlets are turned off.
2. Disconnect AC input power.
3. Remove the battery cover and disconnect the battery connector. The unit is fully shut down.

5 Maintenance

5.1 Precautions

Although the Vertiv™ PowerUPS 200 Series models are designed and manufactured to ensure personal safety, improper use can result in electrical shock or fire. To ensure safety, observe the following precautions:

- Turn off and unplug the UPS before cleaning it.
- Clean the UPS with a dry cloth. Do not use liquid or aerosol cleaners.
- Never block or insert any objects into the ventilation holes or other openings of the UPS.
- Do not place the UPS power cord where it might be damaged.

5.2 Battery Charging

The batteries are valve regulated, non-spillable, lead acid and should be kept charged to attain their design life. The PowerUPS 200 Series UPS charges the batteries continuously when it is connected to the utility input power. If the PowerUPS 200 Series UPS will be stored for a long time, we recommend connecting the UPS to input power for at least 24 hours every 4 to 6 months to ensure full recharge of the batteries.

5.3 Battery Replacement

IMPORTANT! Before you proceed, please review the battery safety precautions available at https://www.vertiv.com/ComplianceRegulatoryInfo.

WARNING! Risk of explosion. Can cause equipment damage, injury and death.
Do not dispose of the battery in a fire, as it may explode. Released electrolyte is toxic and is harmful to skin and eyes. If electrolyte comes into contact with the skin, wash the affected area immediately with plenty of clean water and get medical attention.

WARNING! Risk of electric shock. Can cause equipment damage, injury and death.
A battery can present a risk of electrical shock and high short circuit current.

WARNING! Risk of explosion. Can cause equipment damage, injury and death.
A battery can explode if the battery is replaced by an incorrect type. Dispose of used batteries according to the instructions included with the battery pack.

User may safely replace the internal battery pack. See Specifications on page 19, for the part number of the replacement battery for your UPS model number.

To replace the battery, follow the steps below and refer to the applicable Figure 5.1 on page 15:

1. Turn the UPS on its side.
2. Remove the battery compartment cover.
    a. Unscrew the UPS front panel (battery cover) screws on the bottom front of the UPS and slide it by gently pushing it in the opposite direction.

b. Remove the front panel and place it on the side to expose the battery.

3. Disconnect the battery.
    a. Pull the red wire first from the battery terminal before sliding out the battery compartment.

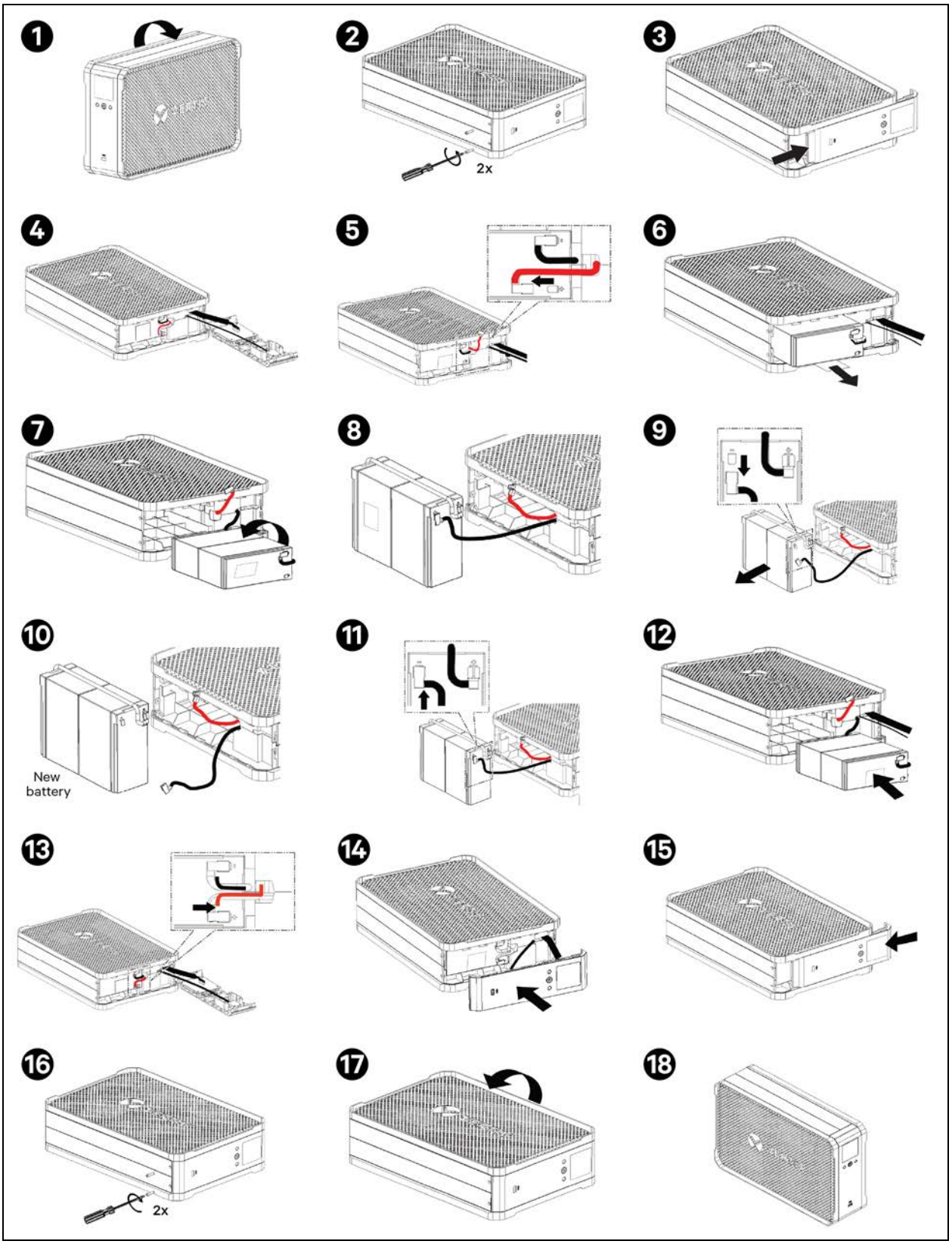
NOTE: Make sure to disconnect the red wire first, then the black.

    b. slide out the battery and disconnect the black wire from the terminal on the other side of the battery
4. Reconnect the replacement battery.
    a. Plug the removed black wire first into the terminals of the new replacement battery.

NOTE: Always plug in the black wire first, then the red. Ensure the black wire connects to the black terminal and the red wire to the red terminal.

    b. Orient the cables and the replacement battery in the same way as the removed battery and slide into the UPS.
    c. Plug the removed red wire into the terminal of the new replacement battery.
5. Reassemble the battery compartment cover.
    a. Slide the UPS front panel (battery cover) back on towards the bottom of the UPS until it fits on the UPS.
    b. Secure it by tightening the screw.
6. Return the UPS to its upright position.
7. Press and hold the power button for 1 second to initiate the battery self test and clear any previous battery fault warning.
8. Properly dispose of the old batteries at an appropriate recycling facility or return them to Vertiv in the packing material for the new batteries.
9. Properly dispose of the old batteries at an appropriate recycling facility or return them to Vertiv using the packing material of the new batteries.

Figure 5.1 Battery Replacement—PowerUPS 200 Series 1000/1600 VA UPS Models



This page intentionally left blank

6 Troubleshooting

This section indicates various UPS symptoms you may encounter and provides a troubleshooting guide in the event the UPS develops a problem. Use the following information to determine whether external factors caused the problem and how to remedy the situation.

6.1 Audible Alarm (Buzzer)

An audible alarm accompanies various events during UPS operations. Table 6.1 below, describes the sounds and their meaning.

Table 6.1 Audible Alarm Descriptions

Sound	Indicates
One beep every 10 seconds	Battery mode
One beep every 0.5 seconds	UPS warning
One beep every second	Low battery warning
One beep every 2 seconds	Battery replacement warning. To replace the battery, refer Battery Replacement on page 13.
Continuous beep	UPS fault
One long beep	Power on

6.2 Warning Indicator

The UPS has three early warning indicators that allow the UPS to function normally for a short period before the outputs are shut off.

Table 6.2 Warning Indicators and Actions

Icon Displayed	Audible Alarm	Description	Corrective Action
	One beep every 0.5 seconds	The load devices plugged in to the UPS output are utilizing more power than the UPS rating.	Reduce the load to below the UPS rating specified in **Table 7.1** on page 19.
	One beep every 1 seconds	The battery is low.	Charge the UPS battery for at least 8 hours.
	One beep every 2 seconds	The battery is weak or damaged.	Charge the UPS battery for at least 8 hours, or replace the battery, see Battery Replacement on page 13.

6.3 Faults

The Vertiv™ PowerUPS 200 Series models fault indicator is the red LED on the front panel. If this warning/fault LED is on solid, and there is a continuous audible beep, the UPS has detected a problem and automatically shut off the output.

To troubleshoot the fault:

1. Turn off the UPS, disconnect all connected equipment (loads), and restart the UPS.
2. Check the fault status:
   - If the fault is still active, refer to the Table 6.3 below to identify and resolve the issue. If the fault persists after referring to the table, contact Vertiv Technical Support for assistance or replacement.
   - If the fault is no longer active but the connected equipment is still not receiving power, the issue may be with the equipment itself. Reconnect devices one at a time to identify the faulty device.

Table 6.3 Troubleshooting

Fault Code	Description	Corrective Action
E01	Output short circuit.	Turn off the UPS, disconnect all loads, and restart the UPS. • If the fault is still active, call 1-800-543-2378 for service/warranty replacement. • If the fault is no longer active, plug in equipment one at a time to locate the device with the short circuit.
E02	Output overload exceeded warning time, and output is shut off.	Turn off the UPS, disconnect all loads, and restart the UPS. Plug in equipment one at a time and make sure not to exceed the UPS rating for load capacity.
E03	AVR overtemperature exceeded warning, and output is shut off.	Turn off the UPS, disconnect all loads, ensure proper ventilation around the UPS, clear any obstructions, and restart the UPS. • If the fault is no longer active, plug in equipment and make sure the load does not exceed the UPS rating for load capacity. • If the fault is still active, call 1-800-543-2378 for service/warranty replacement.
E04	Output voltage too high in battery mode: Internal inverter circuitry failure.	Turn off the UPS, call 1-800-543-2378 for service/warranty replacement.
E05	Overcharge fault: Faulty charging circuit.	Turn off the UPS, call 1-800-543-2378 for service/warranty replacement.
E06	Battery voltage too low fault: Internal battery is damaged or dead.	Charge the UPS for at least 12 hours or replace the battery, refer Battery Replacement on page 13.

7 Specifications

Table 7.1 PowerUPS 200 Series Specifications

Model Number	PAS6-1000IT-IEC	PAS6-1000IT-SCH	PAS6-1600IT-IEC	PAS6-1600IT-SCH
Capacity (VA / W)	1000 / 625		1600 / 1000	
Unit Dimensions, in. (mm) W x D x H	4.7 x 16.9 x 11.4 (120 x 430 x 290)			
Unit Weight, lbs. (kg)	21.6 (9.8)		26.0 (11.8)	26.5 (12.0)
Shipping Dimensions, in. (mm) W x D x H	15.2 x 20.7 x 9.0 (386 x 525 x 228)			
Shipping Weight, lbs. (kg)	26.5 (12.0)		30.9 (14.0)	
Input AC				
Nominal Voltage	220 to 240 VAC			
Voltage Range	140 to 300 VAC			
Input Voltage Measurement Tolerance	±5%			
Frequency Range	50/60 Hz, ±5 Hz (auto-sensing)			
Internal Rear Panel Input Breaker	7 A, 250 VAC		10 A, 250 VAC	
Surge Energy Rating	600 Joules			
Input Cord Length and Connector	6 ft (IEC C14)			
Output AC (On Utility)				
Nominal Voltage	220 to 240 VAC			
Voltage Range	195 to 255 VAC (±5%)			
Frequency Range	50/60 Hz, ±5 Hz (auto-sensing)			
Efficiency	>95% at full load			
Ipeak—Short Circuit Current	409 A		458 A	
Irms—Short Circuit Current	47.1 A		52.3 A	
Output AC (On Battery)				
Nominal Voltage	230 VAC			
Voltage Range	230 ±10% VAC			
Frequency Range	50/60 Hz, ±1 Hz (auto-sensing)			
Waveform	Simulated Sine wave			
Transfer Time	2 to 6 ms (10 ms, maximum)			
Overload Capacity in Normal Mode (measurement tolerance ±10%)	110%—Alarm warning and shutdown after 5 minutes 120%—Alarm warning and immediate shutdown			
Overload Capacity in Battery Mode (measurement tolerance ±10%)	110%—Alarm warning and shutdown after 5 seconds 120%—Alarm warning and immediate shutdown			
Protection	Electronic (over current, short circuit, over charge)			

Table 7.1 PowerUPS 200 Series Specifications (continued)

Model Number	PAS6-1000IT-IEC	PAS6-1000IT-SCH	PAS6-1600IT-IEC	PAS6-1600IT-SCH
Battery Type	Valve Regulated Lead Acid (VRLA)			
Battery Manufacturer / Model	Vertiv / VBATKIT203		Vertiv / VBATKIT204	
Series Connected Battery Quantity x VDC x Ah	2 x 12V x 7.0Ah		2 x 12V x 9.0Ah	
Battery Backed and Surge Protected Outlets	6 IEC	4 Schuko	6 IEC	6 Schuko
Surge-Only Protected Outlets	–	–	2 IEC	–
Environmental Requirements				
Operating Temperature, °F (°C)	32 to 104 (0 to 40)			
Operating Elevation, feet (meter)	0 to 9,842 (0 to 3,000)			
Relative Humidity	0 to 90% non-condensing			
Storage Temperature, °F (°C)	-4 to 104 (-20 to 40)			
Storage Elevation, feet (meter)	0 to 9,842 (0 to 3,000)			
Audible Noise	<45 dBA at 3 ft (1 m) from all sides			
Pollution	PD2			
Overvoltage Category	Category II: Normal mode Category I: Stored energy mode			
Agency				
Safety	CB, CE, IEC/EN IEC 62040-1, UKCA, RCM, EAC			
RFI / EMI	EN/IEC 62040-2, EN/IEC 61000-3-2, EN 61000-3-3, CAT: C1			
Surge Immunity	EN61000-4-5, Level 2 (Line-Neutral) EN61000-4-5, Level 3 (Line-Ground) EN61000-4-5, Level 3 (Neutral-Ground)			
Transportation	ISTA Procedure 3A			

7.1 Battery Run Times

Table 7.2 Battery Run Times in Minutes

Load Percent of Capacity	Model Rating	
	1000 VA / 625 W	1600 VA / 1000 W
10%	82	85
20%	39	38
25%	26	28
30%	20	23
40%	14	16
50%	9	9.8
60%	7	8
70%	5	4.3
75%	3.8	4
80%	3	3
90%	2.6	2.6
100%	2.3	2.3

NOTE: Run times in this table are approximate. They are based upon new, fully charged standard battery modules at a temperature of 25 °C (77 °F) with 100% resistive UPS loading.

This page intentionally left blank

Appendices

Appendix A: Technical Support and Contacts

A.1 Technical Support/Service in the United States

Vertiv Group Corporation

24x7 dispatch of technicians for all products.

1-800-543-2378

Liebert® Thermal Management Products

1-800-543-2778

Liebert® Channel Products

1-800-222-5877

Liebert® AC and DC Power Products

1-800-543-2378

A.2 Locations

United States

Vertiv Headquarters

505 N Cleveland Ave

Westerville, OH, 43082, USA

Europe

Via Leonardo Da Vinci 8 Zona Industriale Tognana

35028 Piove Di Sacco (PD) Italy

Asia

7/F, Dah Sing Financial Centre

3108 Gloucester Road, Wanchai

Hong Kong

A.3 Vertiv™ PowerUPS 200 Series

Our Technical Support staff is ready to assist you with any installation or operating issues you may encounter with your Vertiv product. Visit https://www.vertiv.com/en-us/support/ for additional assistance. Alternatively, please call or email us:

Technical support:

e: liebert.upstech@vertivco.com

p: 1-800-543-2378 menu option 1

Monitoring support:

e: liebert.monitoring@vertivco.com

p: 1-800-543-2378 menu option 2

Warranty support:

e: microups.warranty@vertivco.com

p: 1-800-543-2378 menu option 3

Connect with Vertiv on Social Media

 https://www.facebook.com/vertiv/

 https://www.instagram.com/vertiv/

 https://www.linkedin.com/company/vertiv/

 https://www.x.com/Vertiv/

Vertiv.com | Vertiv Headquarters, 505 N Cleveland Ave, Westerville, OH 43082 USA

SL-80280_REVA_11-25