



Powerstar UPS

Powerstar Inc Shipboard UPS Gaithersburg, MD www.powerstarinc.com
PS6000rm2u, PS6000r2, PS6000SMT, PS6000r2-iso series, PS6002SMT,
PS6003SMT, PS6075 SMT series

Operation Manual

Smart-UPS™ Uninterruptible Power Supply

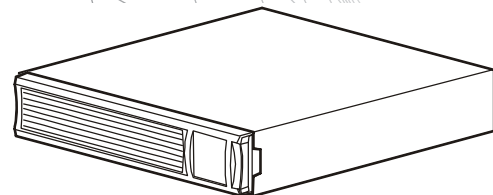
PS6075/PS6100/PS6000

Rack-Mount 2U
Rack Mount 3u

750/1000/1500 VA
120/230 Vac

PS6002 **2200 VA**
120 Vac

PS6003 **3000 VA**
100/120/208/230 Vac



Product Description

The APC™ by Schneider Electric Smart-UPS™ is a high performance uninterruptible power supply (UPS). The UPS provides protection for electronic equipment from utility power blackouts, brownouts, sags, and surges, small utility power fluctuations and large disturbances. The UPS also provides battery backup power for connected equipment until utility power returns to safe levels or the batteries are fully discharged.

This user manual is available on the enclosed CD and on the APC by Schneider Electric Web site, www.apc.com.

Important Safety Messages

Read the instructions carefully to become familiar with the equipment before trying to install, operate, service or maintain it. The following special messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a Caution product safety label indicates that a hazard exists that can result in injury and product damage if the instructions are not followed.

The following safety messages may appear throughout this manual to warn of potential hazards.

 CAUTION
CAUTION indicates a potentially hazardous situation which, if not avoided, can result in equipment damage and minor or moderate injury.

CAUTION
CAUTION indicates a potentially hazardous situation which, if not avoided, can result in equipment damage.

Safety and General Information

Inspect the package contents upon receipt. Notify the carrier and dealer if there is any damage.

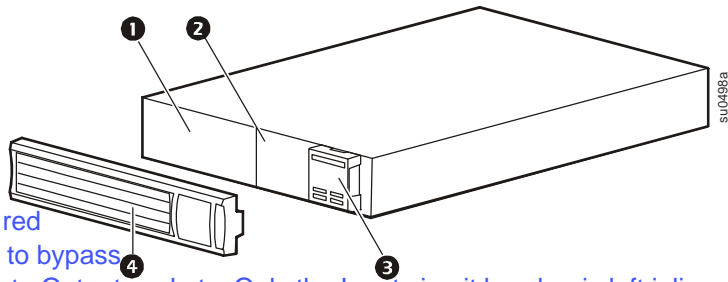
Read the Safety Guide supplied with this unit before installing the UPS.

- Adhere to all national and local electrical codes.
- This UPS is intended for indoor use only.
- Do not operate this UPS in direct sunlight, in contact with fluids, or where there is excessive dust or humidity.
- Be sure the air vents on the UPS are not blocked. Allow adequate space for proper ventilation.
- The battery typically lasts for two to five years. Environmental factors impact battery life. Elevated ambient temperatures, poor quality utility power, and frequent short duration discharges will shorten battery life.
- Connect the UPS power cable directly to a wall outlet. Do not use surge protectors or extension cords.
- The equipment is heavy. Always practice safe lifting techniques adequate for the weight of the equipment.
- The batteries are heavy. Remove the batteries before installing the UPS and XLBP in a rack.
- Always install external battery packs (XLBPs) at the bottom in rack-mount or stack configurations. The UPS must be installed above the XLBPs.
- Always install peripheral equipment above the UPS in rack-mount or stack configurations.
- The UPS will recognize as many as 10 external battery packs connected to the UPS. However there is no limit to the number of XLBPs that can be used with the UPS.
- The model and serial numbers are located on a small, rear panel label. For some models, an additional label is located on the chassis under the front bezel.
- Always recycle used batteries.
- Recycle the package materials or save them for reuse.

Front and Rear Panel Features

Front panel features

- ❶ Battery
- ❷ Battery connector
- ❸ Display interface
- ❹ Bezel



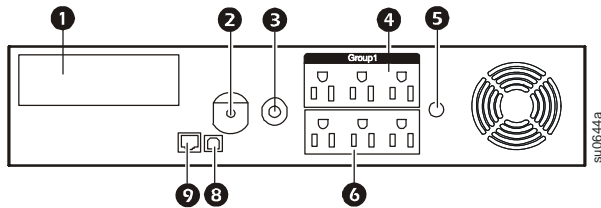
MB switch is an option on some units. It is a rotary knob on front panel with green / red LED indicators. The knob is rotated to Red to bypass UPS electronics. Input power is fed directly to Output sockets. Only the Input circuit breaker is left inline. This is an Emergency mode only. The UPS cannot charge its batteries, and no backup power is provided. Repair or replace the UPS as soon as possible if this switch needs to be used to power your equipment.

Rear panel features

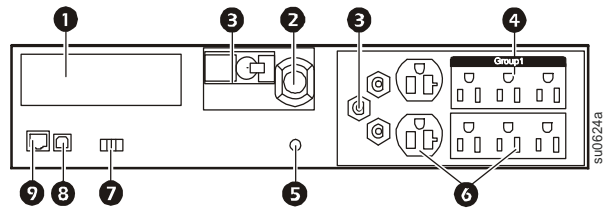
- ❶ SmartSlot for optional NMC accessory card
- ❷ UPS input
- ❸ Circuit breaker/Overload protection
- ❹ Controlled outlet group
- ❺ Chassis ground screw
- ❻ Outlets
- ❼ EPO connector
- ❽ USB port
- ❾ RJ45 connector - UPS monitoring serial port

Powerstar places Circuit breaker on front panel for some units.

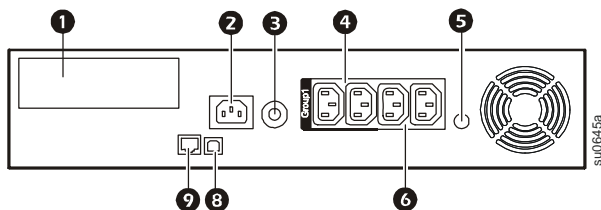
750/1000 VA 120 Vac
1500 VA 100/120 Vac



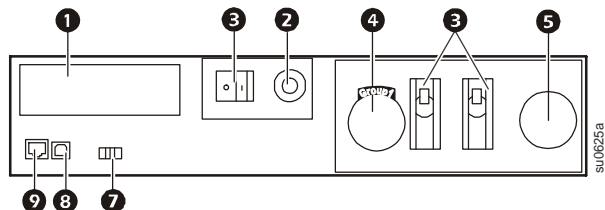
3000 VA 100/120 Vac



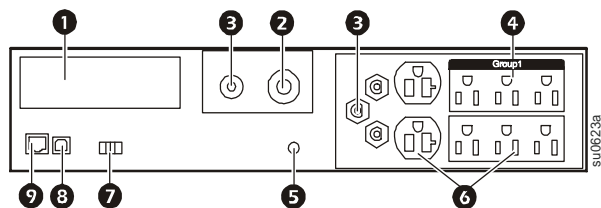
750/1000/1500 VA 230 Vac



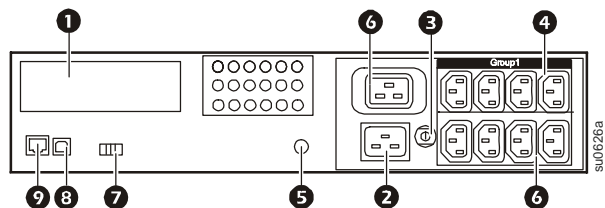
3000 VA 208 Vac



2200 VA 120 Vac



3000 VA 230 Vac



Specifications

For additional specifications, refer to the APC by Schneider Electric Web site at www.apc.com.

Environmental Specifications

Temperature	Operating	0° to 40° C (32° to 104° F) -20° to +50° with Powerstar Premium 'h' batteries
	Storage	-15° to 45° C (5° to 113° F) charge UPS battery every six months
Maximum Elevation	Operating	3,000 m (10,000 ft)
	Storage	15,000 m (50,000 ft)
Humidity	0% to 95% relative humidity, non-condensing	

Installation

UPS

For UPS installation information, refer to the Smart-UPS Installation Guide that is included with the UPS. The guide is also available on the enclosed CD and the APC by Schneider Electric Web site at www.apc.com.

Network Management Card

For installation information, refer to the user manual provided with the Network Management Card (NMC). The user manual is also available on the APC by Schneider Electric Web site at www.apc.com.

Operation

Connect Equipment to UPS

⚠ CAUTION

DAMAGE TO EQUIPMENT OR PERSONNEL

- When installing equipment in a rack, always install the UPS at the bottom of the rack with the peripheral equipment above the UPS.
- The UPS should always be installed below peripheral equipment in rack or stack configurations.

Failure to follow these instructions can result in equipment damage and minor or moderate injury

CAUTION

RISK OF EQUIPMENT DAMAGE

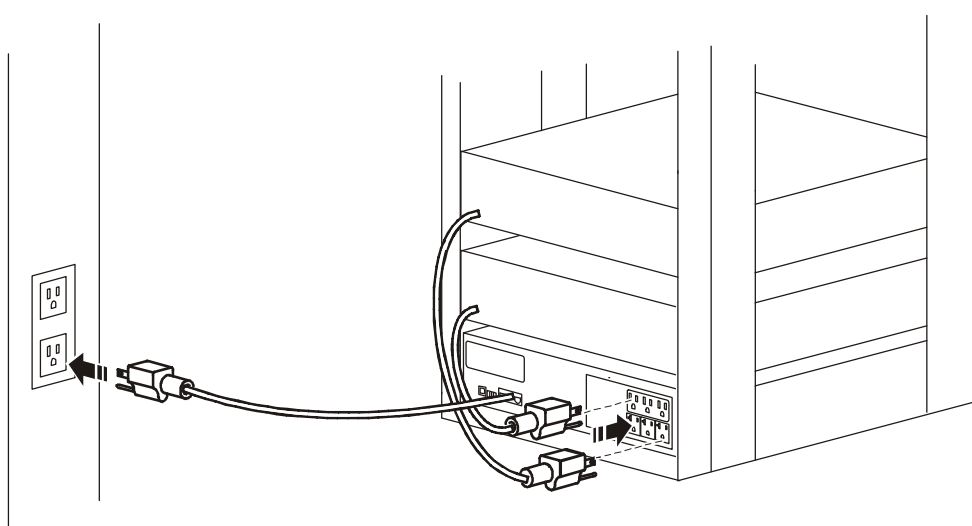
- Adhere to all national and local electrical codes.
- Wiring should be performed by qualified electrician.
- Always connect the UPS to a grounded outlet.

Failure to follow these instructions can result in equipment damage



Note: The UPS will charge to 90% capacity in the first three hours of normal operation. **Do not expect full battery runtime capability during this initial charge period.**

1. Connect equipment to the outlets on the rear panel of the UPS.
2. Connect the UPS to the building utility power.
Always connect the UPS to a two pole, three wire, grounded source.
3. To use the UPS as a master ON/OFF switch, turn on all the equipment that is connected to the UPS.
4. Press the ON/OFF button on the front panel of the UPS to turn on the UPS and all connected equipment.
5. See “UPS Settings” on page 1 for information on how to configure the outlet groups.



Rear panel connectors



Serial port: Connect to a computer to use power management software.



USB port: Connect to a computer to use power management software.

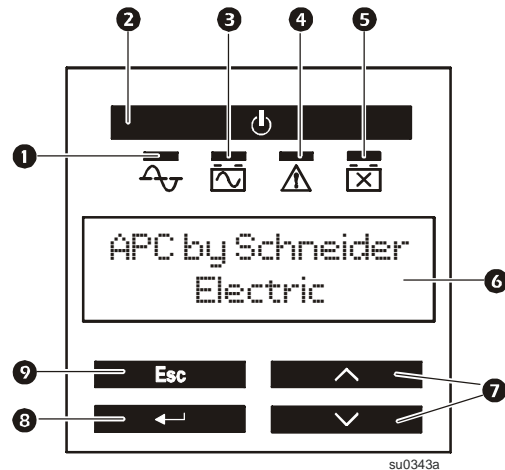


Note: Serial and USB communication can not be used simultaneously.

Ground Screw: The UPS features a ground screw for connecting the ground leads on transient voltage devices. Prior to connecting a ground lead, disconnect the UPS from utility power.

Display Panel Features

- ❶ Online LED
- ❷ UPS ON/OFF key
- ❸ On Battery LED
- ❹ Site Wiring Fault LED
- ❺ Replace Battery LED
- ❻ Display interface
- ❼ UP/DOWN arrow keys
- ❽ ENTER key
- ❾ ESCAPE key



Display Interface Menus

Use the UP/DOWN arrow keys to scroll through the main menu options. Press ENTER to view the submenus under each main menu option. Press ESCAPE to exit a submenu and return to a main menu.

Standard menus

The Standard menus are the most commonly used menus for the UPS.

Menu	General Functions
Status	<hr/> <p>View basic information about the UPS:</p> <ul style="list-style-type: none">• Operating mode• Efficiency of the UPS• Information about the load• Battery capacity• Estimated runtime• Input and output voltage and frequency• Information about the last transfer to battery power• Self-test results <hr/>
Configuration	<hr/> <p>Configure the settings for the UPS:</p> <ul style="list-style-type: none">• Language• Local power quality: Good, Fair, Poor• Choose Standard or Advanced menus• UPS Test settings• Reset to Factory Defaults• Battery installation date• Display: Always On, Auto Off, Auto Dim <hr/>
Test & Diags	<hr/> <p>Use the Test & Diags menu to have the UPS perform a Self-Test, UPS Alarms Test or Calibration Test</p> <hr/>
About	<hr/> <p>Display information about this unit:</p> <ul style="list-style-type: none">• Unit model number• Serial number• Battery information<ul style="list-style-type: none">• Model number• Installation date• Suggested battery replacement date• UPS firmware version <hr/>

Advanced menus

The Advanced menus provide additional options for the UPS and are available only if the display interface is configured to use the Advanced menus.

Menu	General Functions
Status	View detailed information about the UPS: <ul style="list-style-type: none">• Energy meter• Load current• Status of the Switched Outlet Group• Battery voltage• Operation mode• Efficiency• SmartSlot Card (if applicable)
Configuration	Configure advanced settings for the UPS: <ul style="list-style-type: none">• Main and Switched Outlet Group—delays and settings• High and lower transfer points• Sensitivity settings• Date of last battery replacement• Output voltage• Battery settings• Number of battery packs (not available on all models)• Reset energy meter• UPS test settings• Display: Always On, Auto Off, Auto Dim
Control	Control the Main and Switched Outlet Group to turn on, turn off, shutdown, or reboot.
Test & Diags	Perform UPS test and diagnostic functions such as user interface testing, battery tests, and battery calibration.
Log	View the event and error logs for information about any changes to the UPS and any faults.
About	View information about the unit: <ul style="list-style-type: none">• Hardware version• Software version• NMC information, if applicable• SmartSlot Card information, if applicable

Configuration

UPS Settings

Start up Settings

Configure these settings at initial start up, using the display interface or PowerChute™ software.

Note: During start up, use the display interface to configure these settings. If nothing is selected, the unit will use the default settings.

Function	Factory Default	Options	Description
Language	English	<ul style="list-style-type: none">• English• French*• German*• Spanish*• Italian*• Portuguese*• Japanese*	The language for the display interface. *Language options will vary by model.
Local Power Quality	Good	<ul style="list-style-type: none">• Good• Fair• Poor	Select the quality of input utility power. <ul style="list-style-type: none">• If Good is selected, the unit will go on battery power more often to provide the cleanest power supply to the connected equipment.• If Poor is selected, the UPS will tolerate more fluctuations in power and will go on battery power less often. If unsure of the local power quality, select Good.
Menu Type	Standard	Standard or Advanced	The Standard menus display a limited set of menus and options. The Advanced menus include all parameters.

General Settings

Configure these settings at any time, using the display interface or PowerChute software.

Function	Factory Default	Options	Description
High Transfer Point	100 Vac: 108 Vac	<ul style="list-style-type: none"> • 108 Vac • 110 Vac • 112 Vac • 114 Vac 	<p>To avoid unnecessary battery usage, set the transfer point higher if the utility voltage is chronically high and the connected equipment is known to work under this condition. The POWER QUALITY setting will automatically change this setting.</p> <p>Note: Use the Advanced Menus to configure this setting.</p>
	120 Vac: 127 Vac	<ul style="list-style-type: none"> • 127 Vac • 130 Vac • 133 Vac • 136 Vac 	
	208 Vac: 225 Vac	<ul style="list-style-type: none"> • 225 Vac • 229 Vac • 233 Vac • 237 Vac 	
	230 Vac: 253 Vac	<ul style="list-style-type: none"> • 253 Vac • 257 Vac • 261 Vac • 265 Vac 	
Low Transfer Point	100 Vac: 92 Vac	<ul style="list-style-type: none"> • 86 Vac • 88 Vac • 90 Vac • 92 Vac 	<p>Set the transfer point lower if the utility voltage is chronically low and the connected equipment can tolerate this condition. This setting may also be adjusted using the power quality setting.</p> <p>Note: Use the Advanced Menus to configure this setting.</p>
	120 Vac: 106 Vac	<ul style="list-style-type: none"> • 97 Vac • 100 Vac • 103 Vac • 106 Vac 	
	208 Vac: 182 Vac	<ul style="list-style-type: none"> • 170 Vac • 174 Vac • 178 Vac • 182 Vac 	
	230 Vac: 208 Vac	<ul style="list-style-type: none"> • 196 Vac • 200 Vac • 204 Vac • 208 Vac 	
Nominal Output Voltage	100 Vac	N/A	Set the nominal output voltage of the UPS on battery. This is available on 230 Vac models only.
	120 Vac	N/A	
	230 Vac	208-252 Vac	
Transfer Sensitivity	High	High, Reduced, Low	<p>Select the level of sensitivity to power events that the UPS will tolerate.</p> <ul style="list-style-type: none"> • High: The UPS will go on battery power more often to provide the cleanest power supply to the connected equipment. • Low: The UPS will tolerate more fluctuations in power and will go on battery power less often. <p>If the connected load is sensitive to power disturbances, set the sensitivity to High.</p>
Low Battery Warning	120 sec	Set the value in seconds	The UPS will emit an audible alarm when the remaining runtime has reached this level.

Function	Factory Default	Options	Description
Date of Last Battery Replacement	Date set at factory	Reset this date when the battery module is replaced.	
Audible Alarm	On	On/Off	The UPS will mute all audible alarms if this is set to Off or when the display keys are pressed.
Battery Self-Test Interval Setting	On start-up and every 14 days since the last test	<ul style="list-style-type: none"> • Never • Start-up only • Frequency of test (every 7 to 14 days) 	The interval at which the UPS will execute a self-test.
Reset to Factory Default	No	Yes/No	Restore the UPS factory default settings.

Main Outlet Group and Controlled Outlet Group

Controlled outlet group may be disabled for shipboard safety. Please do not use Controlled outlet group to disconnect AC Power to any load.

Overview

The Main Outlet Group and the Controlled Outlet Group can be configured to independently turn off, turn on, shut down, and reboot connected equipment. (These features are not available on the 750 VA tower units.)

The Main and Controlled Outlet Groups can be configured to do the following:

- Turn off: Disconnect from power immediately and restart only with a manual command.
- Turn on: Connect to power immediately.
- Shutdown: Disconnect power in sequence, and automatically reapply power in sequence when utility power becomes available.
- Reboot: Shut down and restart.

In addition, the Main Outlet Group and the Controlled Outlet Group can be configured to do the following:

- Turn on or off in a specified sequence
- Automatically turn off or shut down when various conditions occur



Note: If the Main and Controlled Outlet Groups are not configured, all of the outlets on the unit will still provide battery backup power.

Using the Main and Controlled Outlet Groups



The Main Outlet Group functions as a master switch. It will turn on first when power is applied, and shut off last when there is a power outage and battery runtime has been exhausted.

The Main Outlet Group must be turned on for the Controlled Outlet Group to turn on.

1. Connect critical equipment to the Main Outlet Group.
2. Connect peripheral equipment to the Controlled Outlet Group.
 - Nonessential equipment that should shut off quickly in the event of a power outage to conserve battery runtime can be added to a short power off delay
 - If equipment has dependent peripherals that must restart or shut down in a specific order, such as an ethernet switch that must restart before a connected server, connect the devices to separate groups
 - Equipment that needs to reboot independently from other equipment should be added to a separate group
3. Use the Configuration menus to configure how the Controlled Outlet Group will react in the event of a power outage.

Customize the Main and Controlled Outlet Groups

Use the **Control** menus to change the Main Outlet Group and the Controlled Outlet Group settings.

Function	Factory Default	Options	Description
Name String Outlet Group	Outlet Group 1		
UPS Name String	UPS Outlets		
Turn On Delay	0 sec	Set the value in seconds	The amount of time the UPS or the Controlled Outlet Group will wait between receiving the command to turn on and the actual startup.
Turn Off Delay	<ul style="list-style-type: none"> • 0 sec (UPS Outlets) • 90 sec (Controlled Outlet Groups) 	Set the value in seconds	The amount of time that the UPS or the Controlled Outlet Group will wait between receiving the command to turn off and the actual shut down.
Reboot Duration	8 sec	Set the value in seconds	The amount of time that the UPS or the Controlled Outlet Group must remain off before it will restart.
Minimum Return Time	0 sec	Set the value in seconds	The amount of battery runtime that must be available before the UPS or the Controlled Outlet Group will turn on.
Load Shed On Battery	Disabled	<ul style="list-style-type: none"> • Shutdown with Delay • Shutdown immediately • Turn off immediately • Turn off with delay • Disabled 	<p>When the unit switches to battery power, the UPS can disconnect power to the Controlled Outlet Group to save runtime.</p> <p>Configure this delay time, use the LOAD SHED TIME WHEN ON BATTERY setting.</p>
Load Shed Time when On Battery	Disabled	Set the value in seconds	The amount of time the outlets will function on battery power before they will turn off.
Load Shed On Runtime	Disabled	<ul style="list-style-type: none"> • Shutdown with delay • Shutdown immediately • Turn off immediately • Turn off with delay • Disabled 	<p>When the battery runtime falls below the specified value, the Controlled Outlet Group will turn off.</p> <p>Configure this time using the LOAD SHED RUNTIME REMAINING setting.</p>
Load Shed On Runtime Remaining	Disabled	Set the value in seconds	When the remaining runtime reaches this level, the Controlled Outlet Group will turn off.
Load Shed on Overload	Disabled	<ul style="list-style-type: none"> • Disabled • Enabled 	In the event of an overload (greater than 100% output), the Controlled Outlet Group will immediately turn off to conserve power for critical loads. The ControlledOutlet Group will only turn on again with a manual command.

Network Management Card Settings

These settings are available only on units that have a Network Management Card (NMC) and are set in the factory. These settings can only be modified using an external interface, like the NMC web interface.

- NMC IP Address Mode
- NMC IP Address
- NMC Subnet Mask
- NMC Default Gateway

Emergency Power Off

EPO Overview

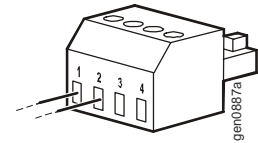
The Emergency Power Off (EPO) option is a safety feature that will immediately disconnect all connected equipment from utility power. The UPS will immediately shut down and will not switch to battery power.

The UPS must be manually restarted to reapply power to connected equipment. Press ON/OFF on the front panel of the unit.

Adhere to all national and local electrical codes. All wiring must be performed by a qualified electrician.

Normally open contacts

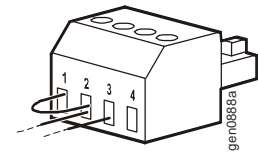
1. If the EPO switch or relay contacts are normally open, insert the wires from the switch or contacts at pins 1 and 2 of the EPO terminal block. Use 16-28 AWG wire.
2. Secure the wires by tightening the screws.



If the contacts are closed, the UPS will turn OFF and power will be removed from the load.

Normally closed contacts

1. If the EPO switch or relay contacts are normally closed, insert the wires from the switch or contacts at pins 2 and 3 of the EPO terminal block. Use 16-28 AWG wire.
2. Insert a wire jumper between pins 1 and 2. Secure the wires by tightening the three screws at positions 1, 2, and 3.



If the contacts are opened, the UPS will turn OFF and power will be removed from the load.

Note: The power for operating the EPO circuit is sourced from pin 1. This is an isolated 24 V which can source only a few milliamperes.

If the normally closed (NC) EPO configuration is used, the EPO switch or relay should be rated for dry circuit applications, the rating should be for low voltage and low current applications. This normally implies the contacts are gold-plated.

The EPO interface is a Safety Extra Low Voltage (SELV) circuit. Connect the EPO interface only to other SELV circuits. The EPO interface monitors circuits that have no determined voltage potential. SELV circuits are controlled by a switch or relay properly isolated from utility power. To avoid damage to the UPS, do not connect the EPO interface to any circuit other than a SELV circuit.

Use one of the following cable types to connect the UPS to the EPO switch.

- CL2: Class 2 cable for general use.
- CL2P: Plenum cable for use in ducts, plenums, and other spaces used for environmental air.
- CL2R: Riser cable for use in a vertical run in a floor-to-floor shaft.
- CLEX: Limited use cable for use in dwellings and for use in raceways.
- Installation in Canada: Use only CSA certified, type ELC, (extra-low voltage control cable).
- Installation in countries other than Canada and the USA: Use standard low-voltage cable in accordance with national and local regulations.

Troubleshooting

Problem and Possible Cause	Solution
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The UPS will not turn on or there is no output

The unit has not been turned on.	Press the ON key once to turn on the UPS.
The UPS is not connected to utility power.	Be sure the power cable is securely connected to the unit and to the utility power supply.
The input circuit breaker has tripped.	Reduce the load on the UPS. Disconnect nonessential equipment and reset the circuit breaker.
The unit shows very low or no input utility voltage.	Check the utility power supply to the UPS by plugging in a table lamp. If the light is very dim, check the utility voltage.
The battery connector plug is not securely connected.	Be sure that all battery connections are secure.
There is an internal UPS fault.	Do not attempt to use the UPS. Unplug the UPS and have it serviced immediately.

The UPS is operating on battery, while connected to utility power

The input circuit breaker has tripped.	Disconnect nonessential equipment and reset the circuit breaker.
There is very high, very low, or distorted input line voltage.	Move the UPS to a different outlet on a different circuit. Test the input voltage with the utility voltage display. If acceptable to the connected equipment, reduce the UPS sensitivity.

UPS emits intermittent beeps

The UPS is operating normally.	None. The UPS is protecting the connected equipment.
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UPS does not provide expected backup time

The UPS battery is weak due to a recent power outage or is near the end of its service life.	Charge the battery. Batteries require recharging after extended outages and wear out faster when put into service often or when operated at elevated temperatures. If the battery is near the end of its service life, consider replacing the battery even if the replace battery LED is not illuminated.
The UPS is experiencing an overload condition.	Check the UPS load display. Unplug unnecessary equipment, such as printers.

Display interface LEDs flash sequentially

The UPS has been shut down remotely through software or an optional accessory card.	None. The UPS will restart automatically when utility power is restored.
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Problem and Possible Cause	Solution
The Fault LED is illuminated The UPS displays a fault message and emits a constant beeping sound	
Internal UPS fault.	Do not attempt to use the UPS. Turn the UPS off and have it serviced immediately.
All LEDs are illuminated and the UPS is plugged into a wall outlet	
The UPS has shut down and the battery has discharged from an extended outage.	None. The UPS will return to normal operation when the power is restored and the battery has a sufficient charge.
The Replace Battery LED is illuminated	
The battery has a weak charge.	Allow the battery to recharge for at least four hours. Then, perform a self-test. If the problem persists after recharging, replace the battery.
The replacement battery is not properly connected.	Be sure the battery connector is securely connected.
The UPS displays a site wiring fault message	
Wiring faults detected include missing ground, hot-neutral, polarity reversal, and overloaded neutral circuit.	If the UPS indicates a site wiring fault, have a qualified electrician inspect the building wiring. Applicable for 120 V units only.

Service

Powerstar supplies Warranty repairs for Powerstar marked UPS. Contact Powerstar for repair.
Contact Powerstar for Replacement battery packs. Your unit may be using special cells for extreme use.

If the unit requires service, do not return it to the dealer. Follow these steps:

Contact Powerstar www.powerstarinc.com

1. Review the *Troubleshooting* section of the manual to eliminate common problems.
2. If the problem persists, contact APC by Schneider Electric Customer Support through the APC by Schneider Electric Web site, www.apc.com.
 - a. Note the model number and serial number and the date of purchase. The model and serial numbers are located on the rear panel of the unit and are available through the LCD display on select models.
 - b. Call APC by Schneider Electric Customer Support and a technician will attempt to solve the problem over the phone. If this is not possible, the technician will issue a Returned Material Authorization Number (RMA#).
 - c. If the unit is under warranty, the repairs are free.
 - d. Service procedures and returns may vary internationally. Refer to the APC by Schneider Electric Web site for country specific instructions.
3. Pack the unit in the original packaging whenever possible to avoid damage in transit. Never use foam beads for packaging. Damage sustained in transit is not covered under warranty.
 - a. **Always DISCONNECT THE UPS BATTERIES before shipping. The United States Department of Transportation (DOT), and the International Air Transport Association (IATA) regulations require that UPS batteries be disconnected before shipping.** The internal batteries may remain in the UPS.
 - b. External Battery Pack products are deenergized when disconnected from the associated UPS product. It is not necessary to disconnect the internal batteries for shipping. Not all units utilize an external battery pack.
4. Write the RMA# provided by Customer Support on the outside of the package.
5. Return the unit by insured, prepaid carrier to the address provided by Customer Support.

Transport the unit

1. Shut down and disconnect all connected equipment.
2. Disconnect the unit from utility power.
3. Disconnect all internal and external batteries (if applicable).
4. Follow the shipping instructions outlined in the *Service* section of this manual.

Two Year Limited Factory Warranty

Powerstar supplies warranty.

Schneider Electric IT Corporation (SEIT), warrants its products to be free from defects in materials and workmanship for a period of three (3) years excluding the batteries, which are warranted for two (2) years from the date of purchase. The SEIT obligation under this warranty is limited to repairing or replacing, at its own sole option, any such defective products. Repair or replacement of a defective product or parts thereof does not extend the original warranty period.

This warranty applies only to the original purchaser who must have properly registered the product within 10 days of purchase. Products may be registered online at warranty.apc.com.

SEIT shall not be liable under the warranty if its testing and examination disclose that the alleged defect in the product does not exist or was caused by end user's or any third person's misuse, negligence, improper installation, testing, operation or use of the product contrary to SEIT's recommendations or specifications. Further, SEIT shall not be liable for defects resulting from: 1) unauthorized attempts to repair or modify the product, 2) incorrect or inadequate electrical voltage or connection, 3) inappropriate on site operation conditions, 4) Acts of God, 5) exposure to the elements, or 6) theft. In no event shall SEIT have any liability under this warranty for any product where the serial number has been altered, defaced, or removed.

EXCEPT AS SET FORTH ABOVE, THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, BY OPERATION OF LAW OR OTHERWISE, APPLICABLE TO PRODUCTS SOLD, SERVICED OR FURNISHED UNDER THIS AGREEMENT OR IN CONNECTION HEREWITH.

SEIT DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY, SATISFACTION AND FITNESS FOR A PARTICULAR PURPOSE.

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