Smart-UPS™ Uninterruptible Power Supply

SMT750RMJ1U

SMT1K2RJ1U

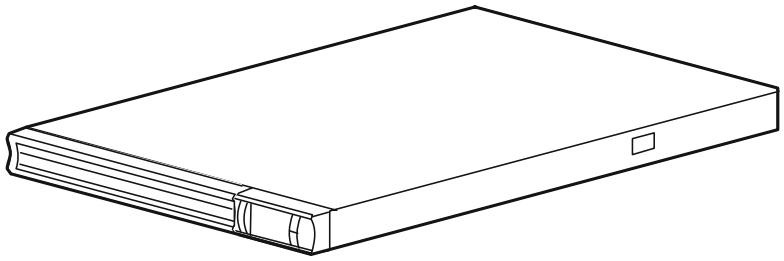
100 Vac

Rack-mount 1U

User Manual

EN TME99212

08/2025



Legal Information

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS - This manual contains important instructions that should be followed during installation, operation and maintenance of the Smart-UPS and batteries.

This is the “Read user manual” symbol. Read the user documentation carefully and look at the UPS to become familiar with the it before trying to install or operate it.

Read the Safety Guide supplied with the UPS to become familiar with the safety requirements before trying to install or operate the UPS.

Read the instructions in this manual carefully to become familiar with the UPS.

The following special messages may appear throughout this document or on the UPS to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

The addition of this symbol either to a “Danger” or “Warning” product safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Product Handling Guidelines

				 
<18 kg <40 lb	18-32 kg 40-70 lb	32-55 kg 70-120 lb	>55 kg >120 lb	

Electrical equipment should be installed operated and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction, installation, and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.

Safety and General Information

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

Additional safety information can be found in the Safety Guide supplied with this unit.

- Adhere to all local and national electrical codes.
- Do not work alone under hazardous conditions.
- All wiring must be performed by a qualified electrician.
- **Changes and modifications to this unit not expressly approved by Schneider Electric could void the warranty.**
- Schneider Electric shall not be held liable for any loss arising from the operation of this UPS.
- This UPS is designed to work with a nominal input voltage of 100 Vac (50/60 Hz). Operating the UPS with a different nominal input voltage will result in damage to the UPS. Schneider Electric will not be responsible for any damages or losses arising from connecting the UPS to an incorrect voltage.
- This UPS is intended for indoor use only.
- Always install peripheral equipment above the UPS in rack-mount configurations.
- The UPS is intended for IT environments. Do not operate this unit 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.
- For a UPS with a factory installed power cord, connect the UPS power cable directly to a wall outlet. Do not use surge protectors or extension cords.
- Always practice safe lifting techniques adequate for the weight of the UPS.
- The battery is heavy. Remove the battery before installing the UPS in a rack.

Battery Safety

⚠ WARNING

RISK OF HYDROGEN SULPHIDE GAS, EXCESSIVE SMOKE AND FIRE

- Replace the battery at least every 5 years or at the end of its service life, whichever is earlier.
- Replace the battery immediately when the UPS indicates battery replacement is necessary.
- Replace batteries with the same number and type of batteries as originally installed in the equipment.
- Replace the battery immediately when:
  - the UPS indicates a battery over-temperature condition
  - there is evidence of electrolyte leakage.
  - The UPS indicates any battery related alarm on a battery near the end of its service life.

  For any of these conditions, power off the UPS, unplug it from the AC input, and disconnect the batteries.
- Do not operate the UPS until the batteries have been replaced.
- Replace all battery modules (including the modules in External Battery Packs) which are older than one year, when installing additional battery packs or replacing the battery module(s).

Failure to follow these instructions could result in death, or serious injury and equipment damage.

- The battery may get discharged naturally due to storage before shipment. Be sure to charge at least 8 hours before use.
- Batteries typically last for two to five years. Environmental factors impact battery life. Elevated ambient temperatures, poor quality utility power causing frequent short duration discharges will shorten battery life. Batteries should be replaced before end of life.
- Schneider Electric uses Maintenance-Free sealed Lead Acid batteries. Under normal use and handling, there is no contact with the internal components of the battery. Over charging, over heating or other misuse of batteries can result in a discharge of battery electrolyte. Released electrolyte is toxic and may be harmful to the skin and eyes.
- Servicing of batteries should be performed or supervised by personnel knowledgeable about batteries and required precautions.
- CAUTION: Do not dispose of batteries in a fire. The batteries may explode.
- CAUTION: Do not open or mutilate batteries. Released material is harmful to the skin and eyes and may be toxic.
- CAUTION: Failed batteries can reach temperatures that exceed the burn thresholds for touchable surfaces.
- CAUTION: A battery can present a risk of electrical shock and high short circuit current. The following precautions should be observed when working on batteries:
  - Disconnect the charging source prior to connecting or disconnecting battery terminals.
  - Do not wear any metal objects including watches and rings.

- Do not lay tools or metal parts on top of batteries.
- Use tools with insulated handles.
- Wear rubber gloves and boots.

De-energizing safety

- The UPS contains internal battery modules and may present a shock hazard even when disconnected from the branch circuit (mains).
- Before installing the UPS or any accessory be sure that the:
  - Input circuit breaker is in **OFF** position.
  - Internal UPS battery modules are removed.

Electrical safety

- Do not handle any metallic connector before power has been disconnected.
- In order to comply with the EMC regulations, output cords and network cables attached to the UPS must not exceed 10 meters in length.
- The protective earth conductor for the UPS carries the leakage current from the load devices (computer equipment). An insulated ground conductor is to be installed as part of the branch circuit that supplies the UPS. The conductor must have the same size and insulation material as the grounded and ungrounded branch circuit supply conductors. The conductor will typically be green, with or without a yellow stripe.
- Leakage current for a pluggable, Type A UPS may exceed 3.5 mA when a separate ground terminal is used.
- The UPS input ground conductor must be properly bonded to protective earth at the service panel.
- This device is designed for commercial power supply and may not function normally with other power sources such as generators.
- Connect this unit to a grounded, two-pole output outlet. This outlet must be connected to a suitable branch protection circuit (fuse or circuit breaker). The UPS can also be connected to a 2 pole input power outlet with a separate ground terminal by installing a conversion adapter with 2 poles and a ground wire. Be sure that the ground wire in the conversion adapter is securely connected to the ground terminal in the input power outlet, for safe use. If the ground wire is not connected, there will be risks like electric shock, leakage current may arise and effects due to improper functioning of surge protection circuit.

General information

- 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.
- Recycle the packaging materials or save them for reuse.

VCCI-A Caution

この装置は、クラスA機器です。この装置を住宅環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

VCCI-A

su1115a

Important Information

	Term	Description
1	Power Supply System	This UPS is a Line-Interactive UPS. In a Line-Interactive UPS, the Surge Suppression and EMI/Noise Filtering Circuits reduce surges and noise present in the input voltage. During a power outage, the UPS transfers to on-battery operation via the inverter. The UPS will also transfer to on-battery when the input voltage waveform contains disturbances or voltage fluctuations that cannot be removed by the EMI filter. The typical transfer time is less than 10 milliseconds, and has no effect on computer equipment.
2	Input Power	Single phase. Connect to a grounded two-pole outlet.
3	Plug Type	NEMA 5-15P. A converter adapter that changes the plug type to 2 pole with a ground wire is available and can be used. For safe use, be sure that the ground wire is connected to the ground terminal in the input power outlet after conversion to 2 pole. If the ground wire is not connected, there will be risks like electrical shock and leakage current, as well as effects due to improper functioning of surge protection circuit.
4	Battery Replacement Period	The Technical Guidelines for Maintenance and Handling of Small-Sized Control-Valve Type Lead-Acid batteries - SBA G0202:2013 - indicate the criteria for replacement period as follows:

Operating temperature condition	Guideline for battery Replacement
5~25 °C	4.0 - 5.0 years
30 °C	2.8 - 3.5 years
35 °C	2.0 - 2.5 years
40 °C	1.4 - 1.7 years

The replacement period depends on the number of discharges and ambient temperature.

Replace the battery as per the guideline given in the table, even if the Replace Battery LED is not illuminated.

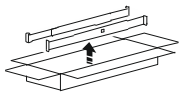
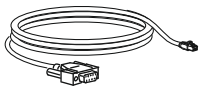
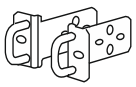
<table>
<tr><th></th><th>Term</th><th>Description</th></tr>
<tr><td>5</td><td>Storage Conditions</td><td>The UPS uses a battery. Due to its characteristics, the battery will self-discharge even when not use. If left in a high discharge state for a long period of time, the battery may get completely discharged and cannot be used.
Therefore, recharge the battery periodically during storage.
The Battery Industry Association's Technical Guidelines for Maintenance and Handling of Small-Sized Control Valve-Type Lead Storage Batteries (SBA G0202:2013) indicate the frequency for recharging as follows.
<table>
<tr><th>Operating temperature condition</th><th>Recharging frequency</th></tr>
<tr><td>25 °C or less</td><td>Within 6 months</td></tr>
<tr><td>30 °C or less</td><td>Within 4 months</td></tr>
<tr><td>35 °C or less</td><td>Within 3 months</td></tr>
<tr><td>40 °C or less</td><td>Within 2 months</td></tr>
</table>
The warranty will be void if the batteries, including the internal batteries, are stored for long periods without recharging.</td></tr>
<tr><td>6</td><td>Battery Replacement Procedure</td><td>To purchase a replacement battery kit
RBC34L for SMT750RMJ1U
APCRBC88J for SMT1K2RJ1U
contact the reseller where you purchased this UPS.
The battery can be easily replaced by the user (see the user's manual, supplied with the replacement battery, for replacement instructions).</td></tr>
<tr><td>7</td><td>Battery Charging</td><td>The battery is always charged during online operation.When the battery is used for the first time, or if the battery charge capacity is low immediately after replacing the battery, it is recommended to disconnect all equipments connected to the UPS and turn on the power with the UPS turned off. The time required for the battery to get fully charged is about 8 hours.</td></tr>
<tr><td>8</td><td>Power Supply Switching</td><td>This is a normal operation. To help protect the connected equipment by providing stable power supply, the UPS switches to on-battery operation not only during utility power outages, but also when noise, surges and sags, or power supply waveform disturbances are detected. Alternatively, changing the UPS sensitivity setting or the AVR voltage setting may prevent frequent switching operations (changing the sensitivity setting may increase the switching time. Also, if the AVR voltage setting value is changed, the output voltage range becomes wider, so check in advance that the connected load device can operate.)</td></tr>
<tr><td>9</td><td>Load Capacity</td><td>Each model has a fixed capacity to provide battery back-up to connected equipment. Be sure that the maximum power consumption does not exceed the maximum output capacity of the UPS.</td></tr>
<tr><td>10</td><td>Overload Management</td><td>Check the total maximum power consumption of the load devices connected to this UPS. If the maximum output capacity of this UPS is exceeded, reduce the number of load devices before use. Reset the circuit breaker on the back panel if it trips. If the problem persists even after reducing the load equipment, contact the call center.</td></tr>
</table>

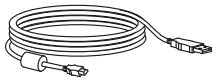
	Term	Description
11	Fan Operation	The Rack UPS and 1500VA or higher UPS have built-in fans. The fan monitors the internal temperature of the device, the state of charge and the amount of load, and operates for cooling as needed.
12	LED Status Indicators scrolling	This condition indicates that the output is temporarily disconnected due to sleep mode. The reason for the shift to sleep mode is due to the scheduling function of the power management software, and the output may be disconnected until the power is restored by the power management software, in the event of a power failure. The UPS will resume output when it returns from sleep mode.
13	AVR Boost / Trim Function	AVR Boost and AVR Trim are Automatic Voltage Regulation (AVR) functions. This function works when the input voltage is raised or lowered by a certain amount from the rated voltage, and the output voltage is adjusted without using the battery. The AVR Boost increases the input voltage and the AVR Trim decreases the input voltage to adjust the output. This feature reduces the need to supply power from the battery and is expected to prevent premature battery deterioration due to power supply environment.
14	UPS Shutdown	Schedule with optional power management software. You can shut down the server at a specified time and automatically reboot it at a specified time. Contact the Call Center for supported OS and hardware requirements.
15	Multi-server management	It is possible by using accessories. The Smart-UPS has two standard interface ports (serial and USB), but if you want to manage multiple servers, there are the following methods. UPS Interface Expander 2 Card (model number: AP9624) and PowerChute Serial Shutdown. Network Management Card (NMC, model number: AP9640J/ AP9641J) and PowerChute Network Shutdown However, you cannot use both NMC and USB/serial ports simultaneously.
16	Leakage Current	The leakage current of this unit is within 3.5 mA.
17	Battery Replacement	The UPS automatically diagnoses the battery once every two weeks, and if it detects battery deterioration, the battery replacement LED illuminates and an alarm beeps. The LCD will inform you of the need to replace the battery. In addition to the above, the UPS also measures the battery ambient temperature to predict the battery replacement time and display the replacement time. See Main Menu → About → Replace Battery [Date].
18	UPS Output	The initial setup may not be complete. Press the escape button to set the initial setting if the "Language:English" or "Setup Wizard Press any Key" screen appears. Press the UPS Output on/off button to start the output of the UPS.
19	Battery Connector	The battery connector may not be connected properly, be sure that the battery connector is securely connected.

	Term	Description
20	Battery Life Degradation	Battery life is greatly affected by ambient temperature and battery discharge frequency. If the UPS intake and exhaust outlets are blocked, and exhaust air from the load equipment can get into the UPS, it can shorten the battery life of the UPS. Check if the UPS ambient temperature is high. Also note that if the UPS is on-battery mode very frequently, the battery will get discharged and the service life will be shortened
21	Display Settings	If the display setting is Auto Dim or Auto Off, it will be dimmed or turned off in about 2 minutes from the normal screen. If the setting menu is displayed, it will return to the normal screen in about 2 minutes, and after about 2 minutes it will be dark or not illuminated.
22	Serial Communication	It is possible that the server's management function has unintended signals flowing from the server on the serial port. Check the server's BIOS and other settings to disable the management function so that no signal is generated on the serial port
23	Port Settings	NMC, USB, and serial ports cannot be used together. Select only one of them.
24	LCC Port setup	When connecting a LCC (AP9620 Legacy Communications SmartSlot Card), use either the USB port or the serial port of the LCC. USB and serial ports on the UPS console are not available
25	Electrical Isolation	It is prohibited to perform insulation withstand voltage testing and insulation resistance testing. This can cause smoke, fire, or failure.
26	“No AC” alert on Display	Be sure of the following: • An input plug is connected. • Electricity is supplied from the commercial power supply.

Inventory

SMT750RMJ1U and SMT1K2RJ1U

Bezel	1U Rail Kit with rails, cleats, screws	Serial cable	Rack-Mount brackets
			

SMT750RMJ1U only	SMT1K2RJ1U only
	

Product Description

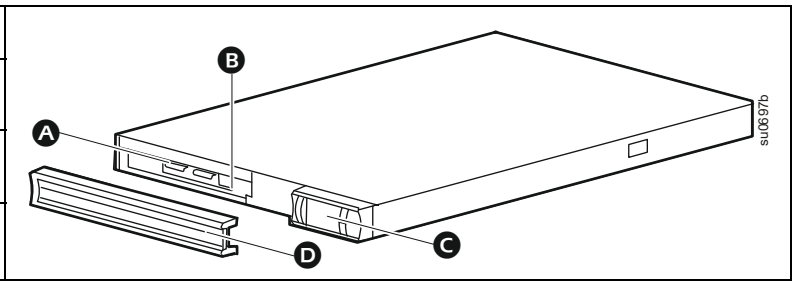
The APC Smart-UPS™ is a high performance uninterruptible power supply (UPS). The UPS helps to protect electronic equipment from utility power blackouts, brownouts, sags, and surges, small utility power fluctuations and large disturbances. The UPS also provides battery backup power for connected equipment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

This user manual is available on Schneider Electric Web site, www.se.com.

Product Overview

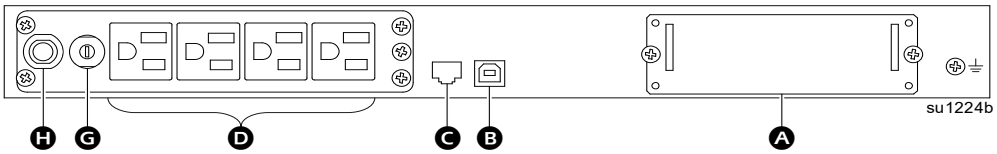
Front panel features

A	**Battery**
B	**Battery connector**
C	**Display interface**
D	**Bezel**

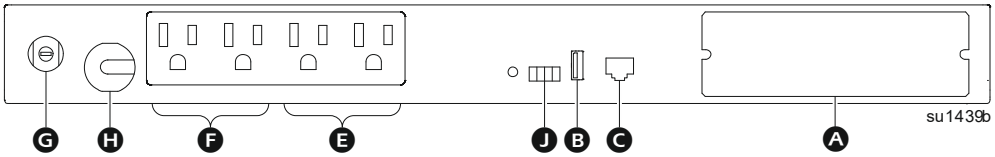


Rear panel features

SMT750RMJ1U



SMT1K2RJ1U



Ⓐ	**SmartSlot for optional accessory card**
Ⓑ	**USB port.** Use this USB port to connect to a computer for monitoring or gracefully shutting down the operating system using PowerChute software. Refer to “Connect and Install Management Software” on page 20 for details. **NOTE**: Serial and USB communication can not be used simultaneously.
Ⓒ	**Serial (RJ45) port.** Use this serial port to connect to a computer for monitoring or gracefully shutting down the operating system using PowerChute software. Refer to “Connect and Install Management Software” on page 20, for details.
Ⓓ	**Main outlet group**
Ⓔ	**Switched Outlet group 1**
Ⓕ	**Switched Outlet group 2**
Ⓖ	**Circuit breaker / Overload protection**
Ⓗ	**UPS input**
Ⓙ	**EPO connector**

Specifications

For additional specifications, go to Schneider Electric Web site www.se.com.

		SMT750RMJ1U	SMT1K2RJ1U
Weight Specifications	**UPS + Battery Pack**	20 kg (44 lb)	24 kg (53 lb)
	Battery Pack	6 kg (13 lb)	10.5 kg (23 lb)
Temperature	**Operating**	0 to 40 °C (32 to 104 °F)	
	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	
UPS input plug		NEMA 5-15P	
UPS output sockets		NEMA 5-15R	

Installation

Remove the Battery

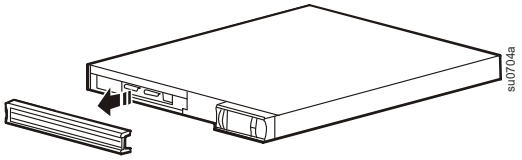
⚠ CAUTION

DAMAGE TO EQUIPMENT OR PERSONNEL

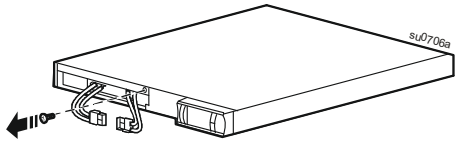
- Always practice safe lifting techniques adequate for the weight of the equipment.
- The combined weight of the UPS and the battery pack is 24 kg (53 lb). The battery pack weighs 10.5 kg (23 lb). Remove the battery pack before installing the UPS in a rack.

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

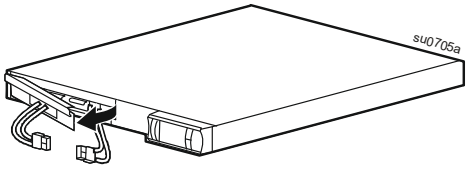
❶ Remove the bezel.



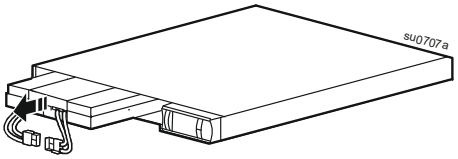
❷ Remove the screw that secures the battery compartment door.



❸ Open the battery compartment door.



❹ Slide the battery out of the UPS. Do not pull on the battery cable to remove the battery from the UPS.



Rack Installation

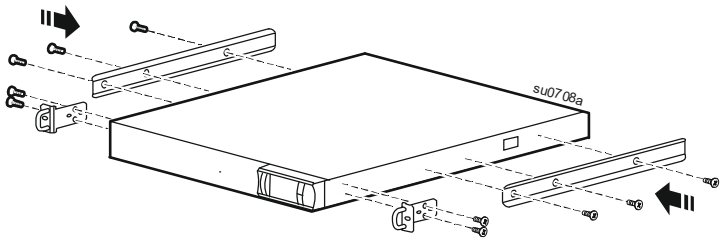
⚠ CAUTION

RISK OF FALLING EQUIPMENT

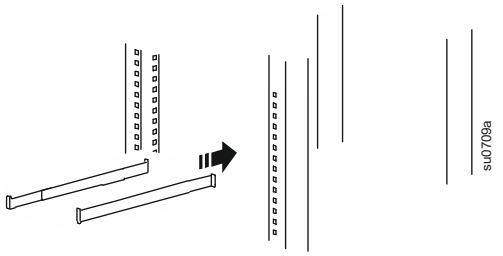
- Always practice safe lifting techniques adequate for the weight of the equipment.
- Always use the recommended number of screws to secure brackets to the UPS.
- Always use the recommended number of screws and cage nuts to secure the UPS to the rack.
- Always install the UPS at the bottom of the rack.
- Always install the external battery pack below the UPS in the rack.
- Place the rack in the location where the equipment will be used.
- Do not move the rack once the UPS is installed.

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

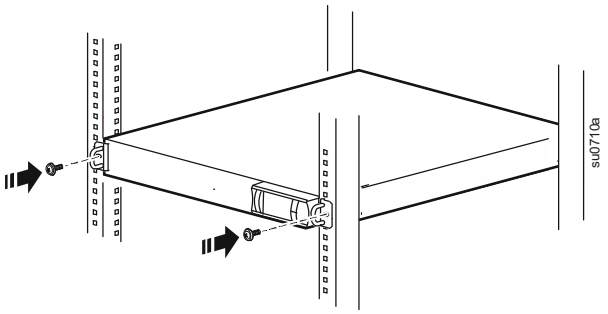
❶ Secure the rail cleats and brackets to the UPS. Use two screws for each rack-mount bracket and three screws for each rail cleat.



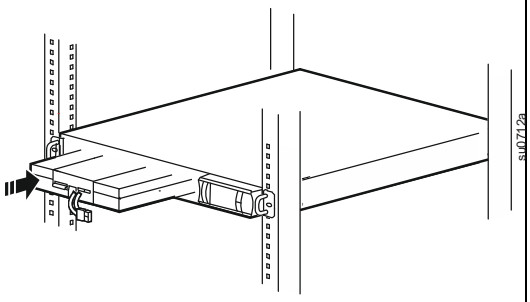
❷ Install the 1U Rail Kit included with the UPS. Refer to the installation instructions provided with the rail kit.



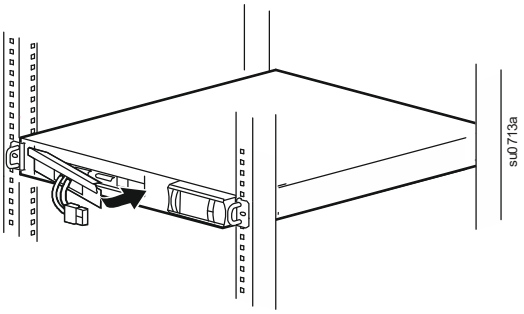
❸ Slide the UPS into the rack. Secure the brackets to the rack using the screws provided.



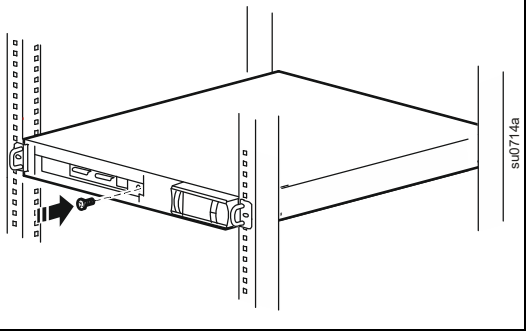
❹ Slide the battery into the UPS.



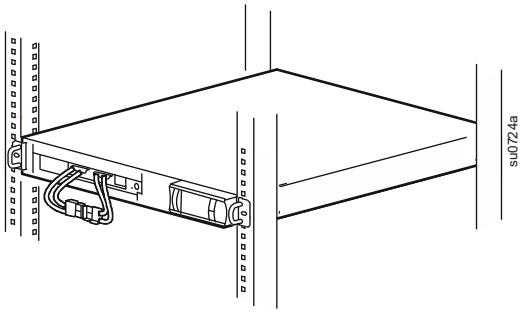
❺ Install the battery compartment door.



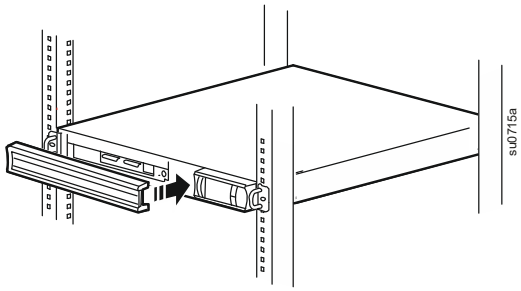
❻ Secure the door with the screw previously removed.



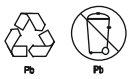
❼ Secure the two battery connectors as shown in the diagram below. Be sure the wires and connectors are neatly tucked in, and not pressed against the battery bracket or other metal edges nearby



❽ Install the bezel on the front of the UPS.



Battery Replacement



Always recycle used batteries.
For information on recycling a used battery, refer to the Battery Disposal Information sheet included with the replacement battery.

Replace used batteries with Schneider Electric approved batteries.To order a replacement battery go to Schneider Electric Web site, www.se.com.

Battery life is highly dependent on temperature and use. To identify when to replace batteries, Smart-UPS have a predictive battery replacement date indicator in the “About” menu and automatic (and configurable) self-tests.

Proactively replace batteries to maintain the highest availability. To ensure protection and high performance, use only genuine APC Replacement Battery Cartridges (RBC™). The APC RBC contains instructions for battery replacement and disposal. To order a replacement battery go to Schneider Electric Web site, www.se.com.

UPS Model	Replacement Battery	Battery Module
SMT750RMJ1U	RBC34L	Lead acid, 1 module, 24 Vdc
SMT1K2RJ1U	APCRBC88J	Lead acid, 1 module, 36 Vdc

Operation

Connect Equipment

⚠ CAUTION

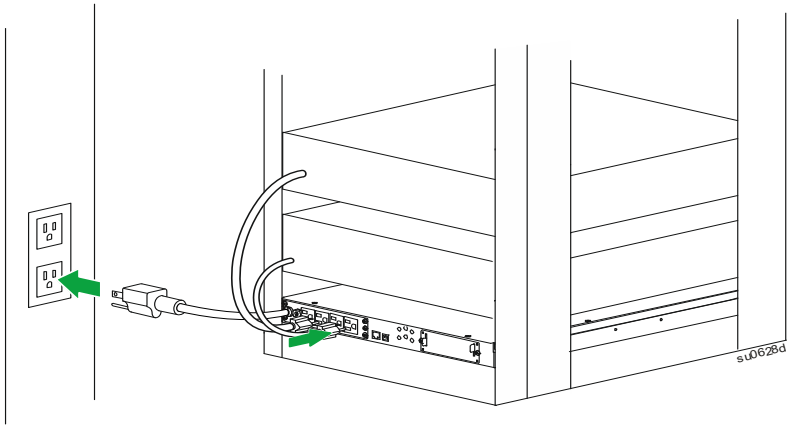
RISK OF ELECTRIC SHOCK

- Adhere to all local and national 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 minor or moderate injury.

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.**

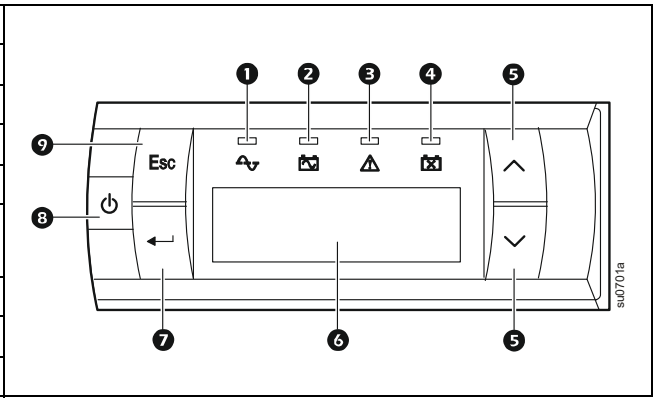
1. Connect the protected equipment to the outlets on the rear panel of the UPS.
2. Connect the UPS to the building utility power. **Connect the UPS to a two pole, three wire, grounded source only.**
3. To use the UPS as a Master On/Off switch, turn on equipment that is connected to the UPS.
4. To turn on the UPS and all connected equipment press the UPS ON/OFF button on the Display Interface of the UPS.
5. Refer “Outlet Groups” on page 24 for details on how to use the Outlet Group.



Display Interface

Overview

❶	**Online LED**
❷	**On Battery LED**
❸	**Alert LED**
❹	**Replace Battery LED**
❺	UP/DOWN **arrow buttons**
❻	**Multi-lingual display screen**
❼	ENTER **button**
❽	UPS ON/OFF **button**
❾	ESCAPE **button**



Display interface operation

Use the UP/DOWN arrow buttons to scroll through the main menu options.

Press ENTER to view the sub-menus under each main menu option.

Press ESCAPE to exit a sub-menu and return to a main menu.

Menu overview

The display interface has Standard and Advanced menu screens. The preference for Standard or Advanced menu options is made during initial installation and can be changed at any time using the Configuration menu.

Standard menu is the most commonly used menu. The default screen shows Load and Battery Capacity bar graphs.

The Advanced menu includes more status information and additional sub-menus. The default screen shows scrolling status information.

NOTE: Actual menu screens may differ by firmware revision.

Main Menu	Display Description	Standard Menu	Advanced Menu
Status	Operating mode*	x	x
	Efficiency	x	x
	Load power (W)*	x	x
	Load power (VA)*	x	x
	Load current		x
	Load energy meter		x
	Battery charge state%	x	x
	Battery runtime*	x	x
	Battery voltage	x	x
	Battery temperature		x
	Input voltage and frequency*	x	x
	Output voltage and frequency*	x	x
	Last transfer reason*†	x	
	Last UPS self test result†	x	x
	Outlet group status*		x
	NMC IP address (if applicable)†		x

Main Menu	Display Description	Standard Menu	Advanced Menu
Control	UPS control		x
	Outlet Group control		x
Configuration	Language	x	x
	Green mode	x	x
	Output voltage setting (if applicable)		x
	Local power quality	x	x
	Menu type	x	x
	Audible alarms	x	x
	Display mode	x	x
	Sensitivity		x
	Low voltage transfer points		x
	High voltage transfer points		x
	Low battery alert threshold		x
	Automatic self test interval		x
	Battery install date†	x	x
	Reset energy meter		x
	Enter set-up wizard		x
	Perform firmware update (UPS output must be off)		x
	Reset to factory defaults	x	x
	Modbus settings		x
	Outlet group configuration		x
	NMC configuration (if applicable)		x
	FW interface		x
Test & Diagnostics	UPS self test	x	x
	UPS alarms test	x	x
	UPS calibration test	x	x
Logs	Last 10 transfer events (if applicable)		x
	Last 10 alert events (if applicable)		x
About	Model identification	x	x
	Part number	x	x
	Serial number	x	x
	UPS manufacture date	x	x
	Replace battery part number	x	x
	Battery install date	x	x
	Replace battery date	x	x
	UPS firmware revision	x	x
	NMC Information - part/serial / version numbers / manufacture date / MAC address / firmware revision (if applicable)		x

* Advanced menu Status items displayed as scrolling information

† This setting is available only in SMT750RMJ1U.

Turn On or Turn Off the UPS

Turn On the UPS

The first time the UPS is turned on the Setup Wizard screen will run. Follow the prompts to configure UPS settings. Refer to “Start up settings” on page 21 for details.

To turn on the UPS and all connected equipment, press the UPS ON/OFF button on the display interface. Refer to “Display Interface” on page 17 for details.

The connected equipment receives power from the UPS and the self-test runs automatically.

Turn Off the UPS

To turn the output power off, press the UPS ON/OFF button on the display interface.

Follow the prompts displayed on the display interface to either turn off the UPS immediately or after a delay, then press the ENTER button.

The following options are displayed on the display interface. Use the UP/DOWN arrow buttons to select the desired option and then press the ENTER button.

Display Item	Description
Off-Use Delay	Turn off the output of the UPS after the set delay time.
Off-No Delay	Immediately turn off the output of the UPS without any delay.
Reboot-Use Delay	After the outage waiting time, the UPS will reboot (after the output is stopped, reboot).
Reboot-No Delay	The UPS will immediately reboot after the output stops without any delay.
No Action	Do nothing. If you accidentally press the UPS ON/OFF button, select No Action or press the ESC button.

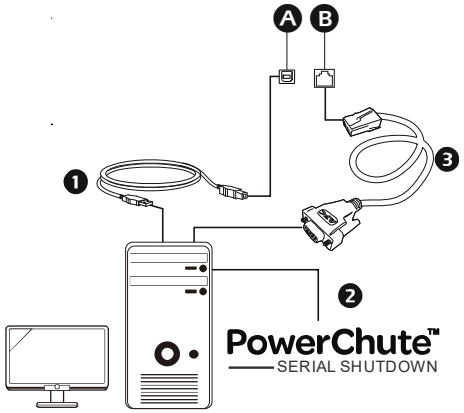
Turn Off Delay can be set from the UPS display interface or the power management software. The default value set in the factory is 90 seconds.

Connect and Install Management Software

NOTE: Contact your UPS dealer/distributor to purchase the PowerChute Serial Shutdown software from Schneider Electric.

Install PowerChute™ Serial Shutdown software on all servers connected to your Smart-UPS, for graceful operating system shutdown, control and monitoring the Smart-UPS. Visit https://www.se.com/pcss

Ⓐ	**USB Port**
Ⓑ	**Serial Port**
NOTE: For location of the port, refer to “Rear panel features” on page 12.	
❶	Connect the USB cable from the rear of the UPS to the protected device such as a server.



❷	For a server or other device with an operating system, download and install the latest version of PowerChute Serial Shutdown from https://www.se.com/pcss. PowerChute Serial Shutdown supports graceful shutdown in the event of an extended power outage. **NOTE**: PowerChute is a 64-bit only application and cannot be installed on a 32-bit operating system.
❸	A built-in Serial port (RJ45) is also available for additional communication options with serial cable. **NOTE**: Serial port and USB port cannot be used at the same time.

Configuration

UPS Settings

Start up settings

At initial start up use the Setup Wizard to configure the following settings. If the initial setup is not complete, the display “Setup Wizard Press any key” (Setup Wizard, press any button) will appear on the display interface.

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

By default, Language, Local Power Quality, Menu Type, and so on are listed in the following table. Select the desired item with the UP/DOWN arrow buttons and press the ENTER button

Function	Factory Default	Options	Description
Language	English	• English • French • German • Spanish • Italian • Portuguese • Japanese	The language used for the display interface.Language options will vary by model.
Local Power Quality	Good	• Good • Fair • Poor	Select the desired utility input power quality. • Good: The UPS will go on battery operation more often to provide clean power to connected equipment. • Fair: The UPS will tolerate some voltage fluctuations before switching to battery power. • Poor: The UPS will tolerate more voltage fluctuations and will go on battery power less often. The **Power Quality** setting will automatically change the High and Low Transfer points and the Sensitivity setting.
Menu Type	Standard	• Standard • Advanced	The Advanced menu includes all parameters. The Standard menu displays a limited set of menus and options.
Date	UPS manufacture date + 90 days	mm-yyyy	At initial start up, enter the current date.

NOTE: The initial screen is automatically displayed when the input power cord of the UPS is connected to the commercial power supply, but after a few minutes, the display screen will be turned off. In that case, press the ESCAPE button to display the initial screen again and complete the setting. If the initial setting is not completed, the output of the UPS is not available even if the UPS ON/OFF button is pressed.

General Settings

Configuration settings may be changed at any time using the display interface or PowerChute™ software. This table provides a brief description of the general settings.

Function	Factory Default	Options	Description
High Transfer Point	108 Vac	108-114 Vac	To avoid unnecessary battery usage, the high and low transfer points can be adjusted. • Set the transfer point higher if the AC voltage is chronically high. • Set the transfer point lower if the AC voltage is chronically low. When the **Power Quality** setting is changed the high and low transfer points will automatically be adjusted. The transfer point options will change based on the output voltage setting.
Low Transfer Point	92 Vac	86-92 Vac	
Transfer Sensitivity	Normal	• Normal • Reduced • Low	Set the sensitivity to a level that is appropriate for the connected equipment. • Normal: The UPS will go on battery power more often to provide clean power supply to the connected equipment. • Reduced: The UPS will tolerate some voltage fluctuations before switching to battery power. • Low: The UPS will tolerate more voltage fluctuations and will go on battery power less often. When the **Power Quality** setting is changed the transfer sensitivity will automatically be adjusted.
Low Runtime Alert	SMT750RMJ1U: 120 sec SMT1K2RJ1U: 150 sec	Value set in seconds	The UPS will emit an audible alarm when the remaining runtime has reached this level.
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 any of the display buttons are pressed.

Function	Factory Default	Options	Description
Display Mode	Auto Dim	• Always On • Auto Dim / Auto Off	• The display interface remains continuously illuminated. • The display interface dims for a few seconds after being inactive for two minutes before turning off.
Auto Self-Test Interval	On start up and 14 days after each self-test.	• Startup + 14 Since • Startup + 7 Since • Start up+ 14 days* • Start up + 7 days* • On start up only • Never	The interval at which the UPS will execute a self-test. The batteries must be charged to at least 70% capacity to perform a self-test. “Start up” on this menu refers to any time the UPS is turned on.
Reset to Factory Default	No	• Yes • No	Restore the UPS factory default settings.
This configuration is applicable only for SMT750RMJ1U model:			
Modbus Setting	Disable	• Enable • Disable	Allows the user to enable or disable the UPS Modbus functionality.
Modbus Address	1	1 - 223	Allows the user to select the Modbus Address.

* This setting is available in SMT750RMJ1U.

Mute audible alarm

The UPS generates an audible alarm when it detects the following conditions:

UPS State	Alarm sound
Battery operation	Four times every 30 seconds
Low battery	0.5-second intermittent beep
Overload	Continuous beep
Battery Disconnect	2-second pause
Internal Failure detected	Continuous beep
Self test failed	1-minute chirping sound every 5 hours

To mute the audible alarm, press either the ESCAPE or ENTER OR UP/DOWN button when the display is in home screen state.

To mute the audible alarm, when the display screen is not in home screen state

- Press ESCAPE button to return to the home screen
- Wait for more than 5 seconds
- Press either ESCAPE or ENTER or UP/DOWN button.

NOTE: Overload alarms and low battery alarms cannot be muted.

The alarm can also be muted through the configuration settings. In this case, all alarms including the alarm for UPS operating on battery and overload will also be muted.

Outlet Groups

Overview

SMT750RMJ1U has one Main outlet group and SMT1K2RJ1U has two Switched Outlet groups. These can be configured to independently perform the following actions:

- Turn off: Disconnect power to connected equipment immediately and restore power to connected equipment only with a manual command.
- Turn on: Connect power to connected equipment immediately.
- Shutdown: Disconnect power, and automatically restore power when utility power becomes available.
- Reboot: Shut down and restart.
- Turn on or off in a specified sequence.
- Automatically turn off or shut down when various conditions occur.

NOTE: If the Main Outlet Group / Switched Outlet Group is not configured, all the outlets on the UPS will provide battery backup power.

Configure the Outlet Group

1. Connect equipment to the Main Outlet Group / Switched Outlet Group.
   - Non-essential 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.
     NOTE: This is applicable for SMT1K2RJ1U only.
2. Use the Configuration menu to configure how the Main Outlet Group / Switched Outlet Groups will react in the event of a power outage.

Customize Main Outlet Group / Switched Outlet Groups

Use the **Configuration** menu to change the Outlet Group settings.

Function	Factory Default	Options	Description
Turn On Delay	0 sec	Set the value in seconds	The amount of time the Main Outlet Group / Switched Outlet Group will wait between receiving the command to turn on and the actual startup.
Turn Off Delay	90 sec	Set the value in seconds	The amount of time that the Main Outlet Group / Switched 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 must remain off before it will restart.
Minimum Return Run Time	0 sec	Set the value in seconds	The amount of battery runtime that must be available before the UPS or Main Outlet Group / Switched Outlet Group will turn on.

Function	Factory Default	Options	Description
Load Shed Time On-Battery	Disabled	• Enable • Disable	When the unit switches to battery power, the UPS can disconnect power to the Main Outlet Group / Switched Outlet Group to save runtime.
Load Shed Time On Battery	32767 sec	Set the value in seconds	The amount of time the Main Outlet Group / Switched Outlet Group will continue to function after the UPS begins operating on battery.
Load Shed Runtime Remain	Disabled	• Enable • Disable	When the battery runtime falls below the specified value, the Main Outlet Group / Switched Outlet Group will turn off.
Load Shed Runtime Remain	0 sec	Set the value in seconds	Remaining runtime required for the outlets to stay on.
Load Shed on Overload*	Disabled	• Enable • Disable	In the event of an overload (greater than 100% output), the Switched Outlet Group will immediately turn off to conserve power for critical loads. The Outlet Group will only turn on again with a manual command.

* This setting is available only in SMT1K2RJ1U.

Emergency Power Off

NOTE: This feature is available in SMT1K2RJ1U model only.

Overview

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

Connect each UPS to the EPO switch. If multiple units are to be controlled with an EPO switch, each UPS must be connected separately to the EPO switch.

The UPS must be restarted for power to return to connected equipment. Press the ON/OFF button on the front panel of the UPS.

⚠ CAUTION

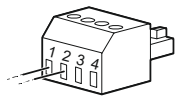
RISK OF ELECTRIC SHOCK

- Adhere to all local and national 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 minor or moderate injury.

Normally open contacts

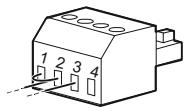
1. If the EPO switch or relay contacts are normally open, insert the wires from the switch or contacts at pins 1 and 2 of the EPO terminal block. Use 16-28 AWG wire.
2. Secure the wires by tightening the screws.



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: Pin 1 is the power source for the EPO circuit, it provides a few milliamperes of 24 V power.

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
The UPS will not turn on or there is no output	
The UPS has not been turned on.	Press the UPS ON/OFF button once to turn on the UPS.
The UPS is not connected to utility power.	Be sure that the power cable is securely connected to the UPS 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 UPS 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.
UPS has detected an internal 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.	Reduce the load on the UPS, 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 is beeping	
The UPS is in normal operation.	None. The UPS is helping to protect the connected equipment.
UPS does not provide expected backup time	
The UPS battery is weak due to a recent 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 indicator is not yet 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.
The Alert LED is illuminated, the UPS displays a message and emits a constant beep	
UPS has detected an internal fault.	Do not attempt to use the UPS. Turn off the UPS and have it serviced immediately.
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 detected problem persists after recharging, replace the battery.
The replacement battery is not properly connected.	Be sure that the battery connector is securely connected.

Service

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

1. Review the *Troubleshooting section* of the manual to eliminate common problems.
2. If the problem persists, contact Schneider Electric Customer Support through Schneider Electric Web site, www.se.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 display interface on select models.
   b. Call 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. Visit 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 International Air Transport Association (IATA) regulations require that UPS batteries be disconnected before shipping.** The internal batteries may remain in the UPS but need to be disconnected.
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.

Limited Factory Warranty

Schneider Electric IT Corporation (SEIT), warrants its products to be free from defects in materials and workmanship for a period of 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.

Store the delivery documents safely to verify the date of purchase.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 or any third person misuse, negligence, improper installation, testing, operation or use of the product contrary to SEIT recommendations of 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.

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

SEIT EXPRESS WARRANTIES WILL NOT BE ENLARGED, DIMINISHED, OR AFFECTED BY AND NO OBLIGATION OR LIABILITY WILL ARISE OUT OF, SEIT RENDERING OF TECHNICAL OR OTHER ADVICE OR SERVICE IN CONNECTION WITH THE PRODUCTS.

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NOTHING IN THIS LIMITED WARRANTY SHALL SEEK TO EXCLUDE OR LIMIT SEIT LIABILITY FOR DEATH OR PERSONAL INJURY RESULTING FROM ITS NEGLIGENCE OR ITS FRAUDULENT MISREPRESENTATION OF TO THE EXTENT THAT IT CANNOT BE EXCLUDED OR LIMITED BY APPLICABLE LAW.

To obtain service under warranty you must obtain a Returned Material Authorization (RMA) number from customer support. Customers with warranty claims issues may access the SEIT worldwide customer support network through Schneider Electric Web site: www.se.com. Select your country from the country selection drop down menu. Open the Support tab at the top of the Web page to obtain information for customer support in your region. Products must be returned with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase.

Other Warranty Information

Warranty registration

Product warranty does not ship with this unit. Within 10 days from the date of purchase, you will be able to access our User Warranty Registration page (https://club-jp.apc.jp/). If you cannot register from the User Warranty Registration page, contact us.

Service beyond warranty period

If any problem persists even after taking appropriate action by referring to the troubleshooting section in this manual, please contact customer support. Various fee based service/maintenance support services will be provided by Schneider Electric.

NOTE: Schneider Electric does not undertake only investigation or provide a report after repair.

Period of paid maintenance service provision

The support period for our products is calculated from the date of purchase. If the user has not registered the product, then the support period would be calculated from the date of manufacture.

APC Worldwide Customer Support

Customer support for this or any other APC product is available at no charge in any of the following ways:

- Visit Schneider Electric Web site www.se.com (Corporate Headquarters) to access documents in the APC Knowledge Base and to submit customer support requests.
- Connect to localized Schneider Electric Web site www.se.com/support/, for specific countries, each of which provides customer support information.
- Global support searching APC Knowledge Base and using e-support.
- Contact Customer Support Center by telephone or e-mail.
  - Local, country specific centers: go to www.se.com/contact for contact information.
  - For information on how to obtain local customer support, contact our representative or the distributor from whom you purchased your APC product.

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As standards, specifications, and designs change from time to time, please ask for confirmation of the information given in this publication.

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