Smart-UPS™ Uninterruptible Power Supply

SMT750C	SMT1500C	SMT2200C
SMT750CUS	SMT1500CUS	SMT2200CUS
SMT1000C	SMT1500CNC	SMT3000C
SMT1000CUS		SMT3000CUS

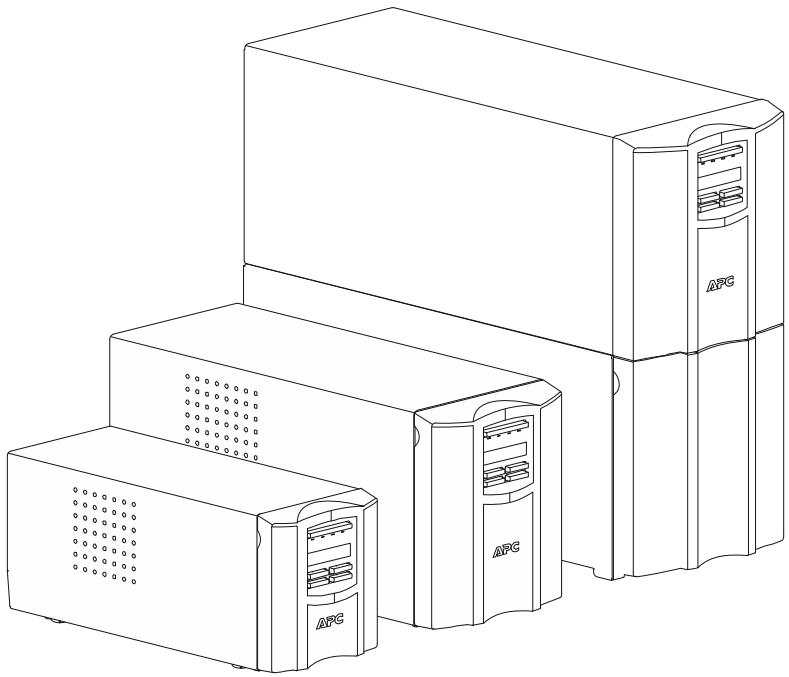
120 Vac

User Manual

EN JPS29631

08/2025

APC™



Schneider Electric™

Legal Information

General Information

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS - This manual contains important instructions that should be followed during installation and maintenance of the 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 that 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, **can result in** death or serious injury.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **can 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 national and local 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.**
- 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 equipment are not blocked. Allow adequate space for proper ventilation.
- For a UPS with a factory installed power cord, connect the input power cord directly to a wall outlet. Do not use surge protectors or extension cords.
- Always practice safe lifting techniques adequate for the weight of the equipment.
- The battery is heavy. Remove the battery before installing the UPS in a rack.

Battery Safety

⚠ WARNING

RISK OF HYDROGEN SULPHIDE GAS AND 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

  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) that are older than one year, when installing additional battery packs or replacing the battery module(s).

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

* Contact Schneider Electric Customer Support to determine the age of the installed battery.

- The batteries typically last 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. The battery 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 of batteries and the required precautions. Keep unauthorized personnel away from batteries.
- CAUTION: Do not dispose off 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.
  - Determine if battery is either intentionally or inadvertently grounded. Contact with any part of a grounded battery can result in electric shock and burns by high short-circuit current. The risk of such hazards can be reduced if grounds are removed during installation and maintenance by a skilled person.

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.
- For models with a hardwired input, the connection to the branch circuit (mains) must be performed by a qualified electrician.
- To comply with the EMC regulations, wherever applicable, 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.
- If the UPS input power is supplied by a separately derived system, the ground conductor must be properly bonded at the supply transformer or motor generator set.

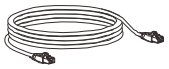
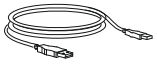
General information

- The model and serial numbers are available on a label located in rear panel of the UPS. For some models, an additional label is located on the chassis behind the front bezel.
- Always recycle used batteries.
- Recycle the packaging materials or save them for reuse.

FCC Class A Radio Frequency Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Inventory

User documentation 	PowerChute software download guide 
Serial cable (RJ45) 	Type A USB cable 

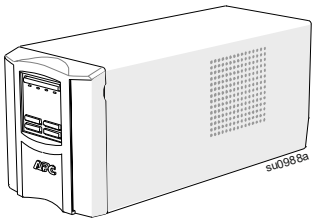
Product Description

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.

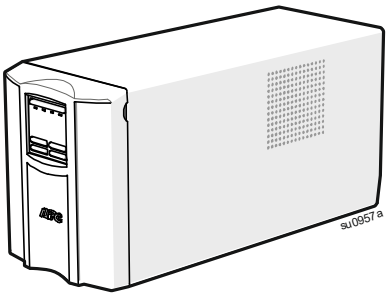
This user manual is available on our Web site, www.se.com.

Product Overview

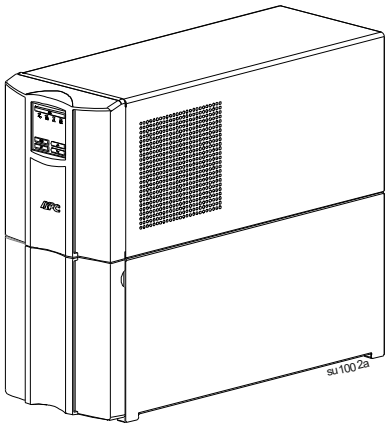
SMT750C and SMT750CUS



SMT1000C, SMT1000CUS, SMT1500C, SMT1500CUS and SMT1500CNC

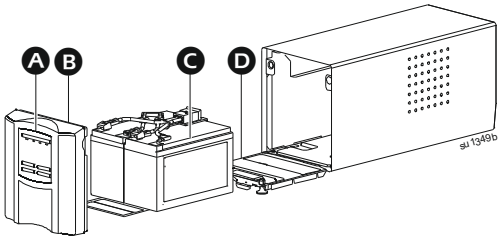


SMT2200C, SMT2200CUS, SMT3000C and SMT3000CUS

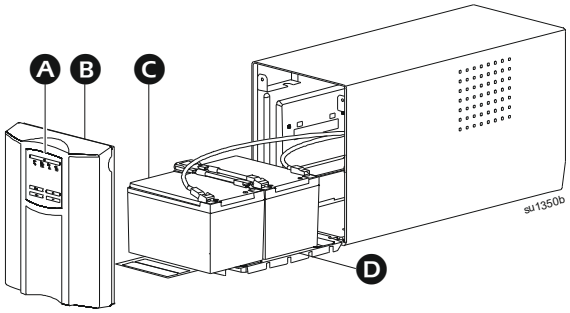


Front Panel Features

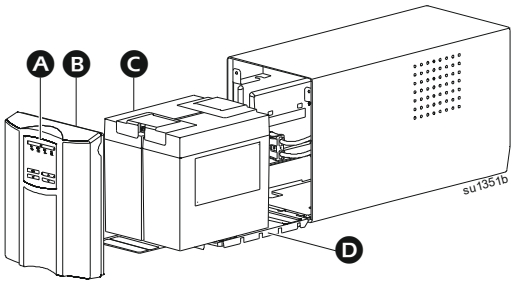
SMT750C and SMT750CUS



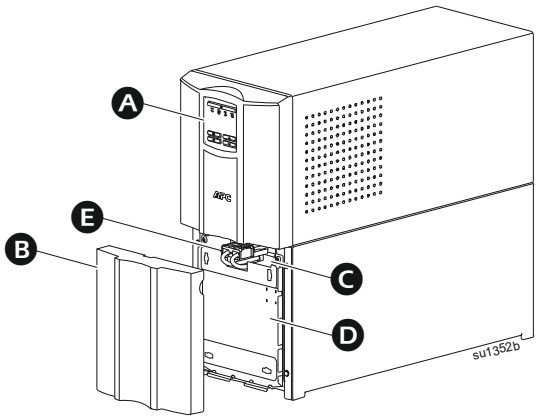
SMT1000C and SMT1000CUS



SMT1500C, SMT1500CUS, and SMT1500CNC



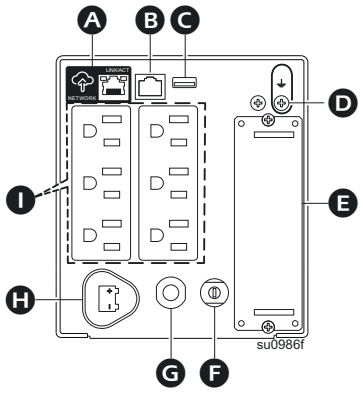
SMT2200C, SMT2200CUS, SMT3000C and SMT3000CUS



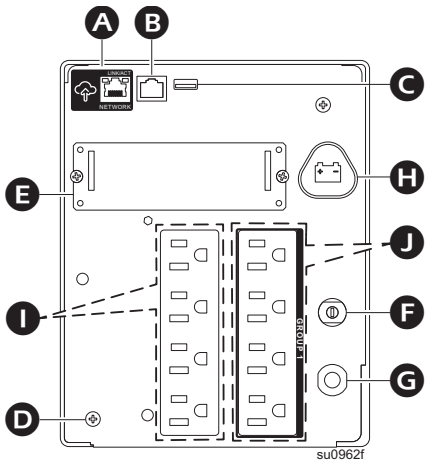
A	**Display** (Refer to “Front Panel Display Features” on page 11 for details)
B	**Bezel**
C	**Battery**
D	**Battery compartment door**
E	**Internal battery connector**

Rear Panel Features

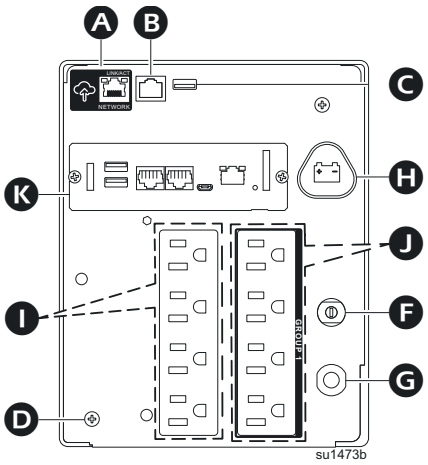
SMT750C and SMT750CUS



SMT1000C, SMT1000CUS, SMT1500C, and SMT1500CUS

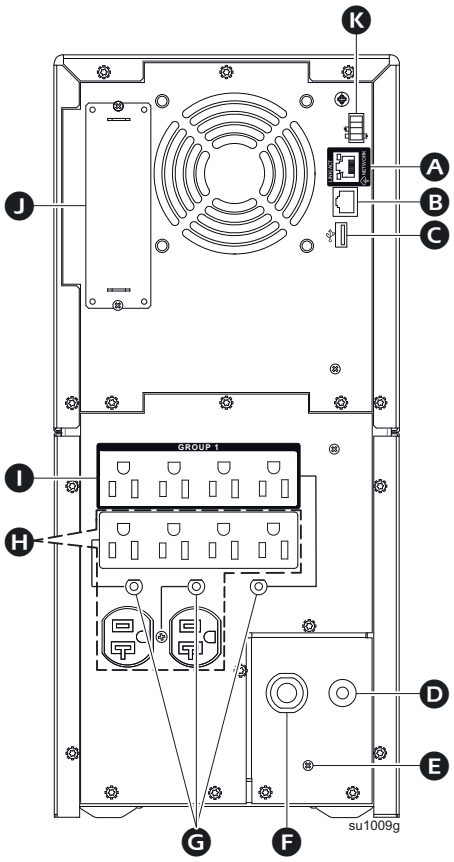


SMT1500CNC

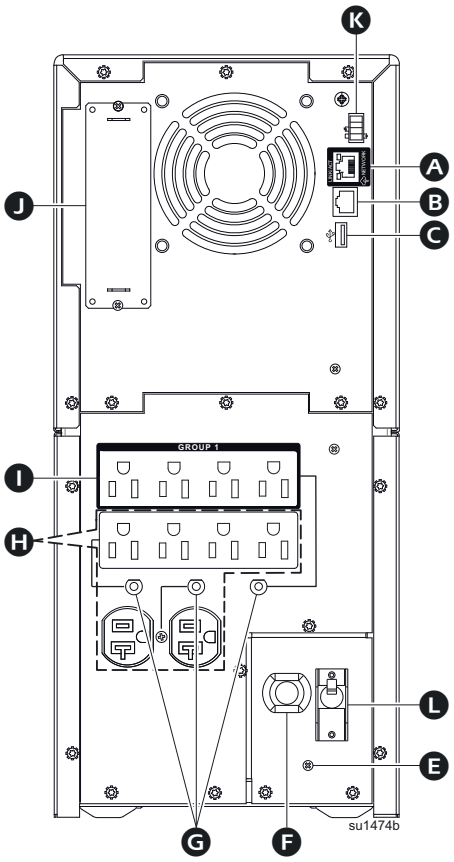


Ⓐ	**SmartConnect Ethernet port** (The features may vary with terms of use. Refer to “SmartConnect” on page 26 for details.)
Ⓑ	**Serial port.** Use this Serial port to connect to a computer for monitoring or gracefully shutting down the server/computer using PowerChute software. Refer to “Connect and Install Management Software” on page 24 for details. **NOTE**: Serial and USB communication can not be used simultaneously.
Ⓒ	**USB port:** Use this USB port to connect to a computer for monitoring or gracefully shutting down the server/computer using PowerChute software. Refer to “Connect and Install Management Software” on page 24 for details**.**
Ⓓ	**Chassis ground connection screw**
Ⓔ	**Smart Slot** for optional Network Management Card (NMC) accessory card**.**
Ⓕ	**Overload protector**
Ⓖ	**UPS input**
Ⓗ	**Battery connector**
Ⓘ	**Outlets**
Ⓙ	**Switched outlet group**
Ⓚ	**Network Management Card (NMC);** Refer to the NMC user documentation supplied for details.

SMT2200C and SMT2200CUS



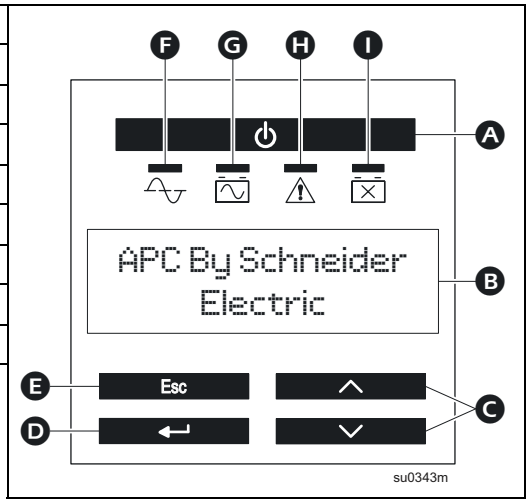
SMT3000C and SMT3000CUS



Ⓐ	**SmartConnect Ethernet port** (The features may vary with terms of use. Refer to “SmartConnect” on page 26 for details.)
Ⓑ	**Serial port;** Use this Serial port to connect to a computer for monitoring or gracefully shutting down the server/computer using PowerChute software. Refer to “Connect and Install Management Software” on page 24 for details. **NOTE**: Serial and USB communication can not be used simultaneously.
Ⓒ	**USB port;** Use this USB port to connect to a computer for monitoring or gracefully shutting down the server/computer using PowerChute software. Refer to “Connect and Install Management Software” on page 24 for details. **NOTE**: Serial and USB communication can not be used simultaneously.
Ⓓ	**Overload protector**
Ⓔ	**Chassis ground connection screw**
Ⓕ	**UPS input**
Ⓖ	**Output overload protector**
Ⓗ	**Outlets**
Ⓘ	**Switched outlet group**
Ⓙ	**Smart Slot** for optional Network Management Card (NMC) accessory card
Ⓚ	**EPO connector**
Ⓛ	**Input circuit breaker**

Front Panel Display Features

A	UPS ON/OFF key
B	Multi-lingual display screen
C	UP/DOWN Selection keys
D	ENTER key
E	ESCAPE key
F	**Online** LED
G	**On Battery** LED
H	**Error Detected** LED
I	**Replace Battery** LED



Specifications

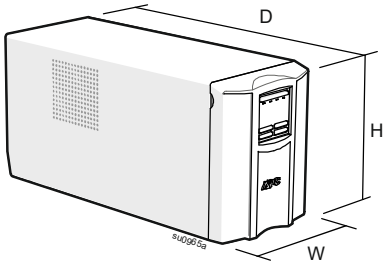
Environmental specifications

For additional specifications, refer to our web site at www.se.com .

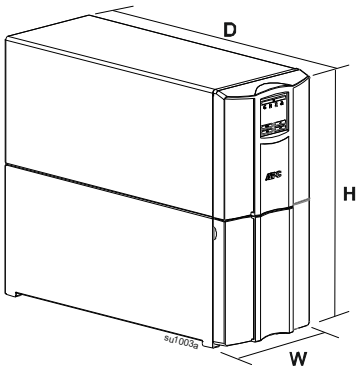
Temperature	**Operating**	0 to 40 °C (32 to 104 °F)
	Storage	-15 to 45 °C (5 to 113 °F) Charge UPS battery every six months
Maximum Elevation	**Operating**	3,000 m (10,000 ft)
	Storage	15,000 m (50,000 ft)
Humidity		0% to 95% relative humidity, non-condensing
International Protection Code		IP20

Dimensions and weights

SMT750C, SMT750CUS, SMT1000C, SMT1000CUS, SMT1500C, SMT1500CUS, and SMT1500CNC



SMT2200C, SMT2200CUS, SMT3000C and SMT3000CUS



Model	Dimensions (in/mm) H x W x D	Weight (lb / kg)
SMT750C, SMT750CUS	6.3 x 5.4 x 14.5 in (161 x 138 x 369 mm)	27.6 / 12.5
SMT1000C, SMT1000CUS	8.6 x 6.7 x 17.3 in (219 x 171 x 439 mm)	44.3 / 20.1
SMT1500C, SMT1500CUS, SMT1500CNC		54.2 / 24.6
SMT2200C, SMT2200CUS	17 x 7.7 x 21.4 in (435 x 197 x 544 mm)	112.2 / 50.9
SMT3000C, SMT3000CUS		116.2 / 52.7

Installation

Placement

The UPS is intended for IT environments. Avoid placement where there is excessive dust, temperature and humidity. Note that temperature in excess of 25 °C may have an adverse effect on battery and UPS life. All vents on the side or rear of the UPS should be free from obstructions.

⚠ CAUTION

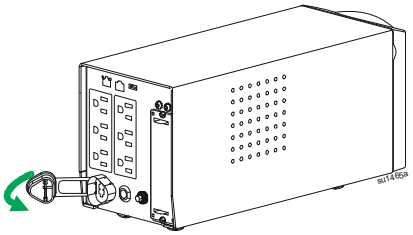
RISK OF FALLING EQUIPMENT

The UPS is heavy. Always practice safe lifting techniques adequate for the weight of the equipment.

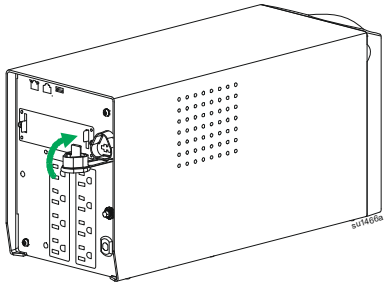
Failure to follow these instructions can result in equipment damage and minor or moderate injury.

Connect battery

SMT750C, SMT750CUS

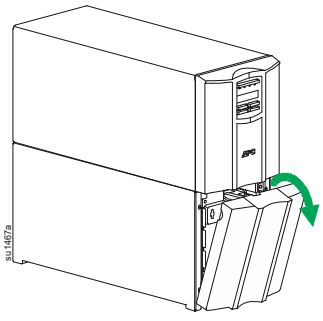


SMT1000C, SMT1000CUS, SMT1500C, SMT1500CNC, SMT1500CUS

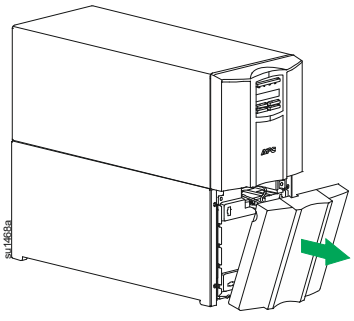


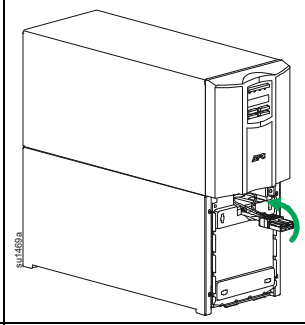
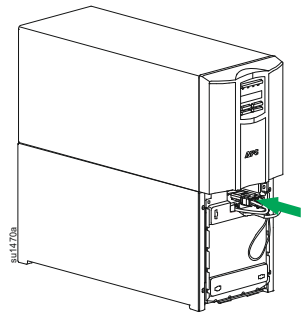
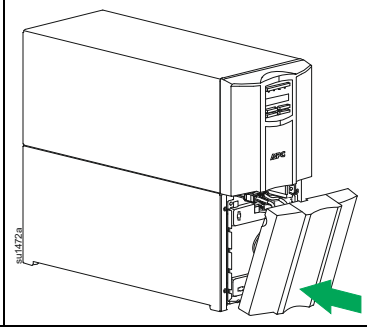
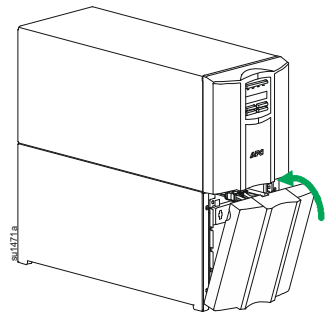
SMT2200C, SMT2200CUS, SMT3000C, SMT3000CUS

❶ Uninstall the battery compartment bezel from its holding clasps



❷ Move the battery compartment bezel away from the UPS



❸ Align the internal battery connector with the receptacle in the UPS. 	❹ Push the internal battery connector till it locks securely 
❺ Align the battery compartment bezel to touch the UPS 	❻ Re-install the battery compartment bezel 

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.

Battery life is highly dependent on temperature and use. To identify when to replace batteries, APC 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™). APC RBC contains instructions for battery replacement and disposal. Replace used batteries withSchneider Electric approved batteries. To order a replacement battery go to Schneider Electric Web site, www.se.com.

UPS Model	Replacement Battery	Battery Module
SMT750C, SMT750CUS	RBC48	Lead acid, 1 module, 24 Vdc
SMT1000C, SMT1000CUS	RBC6	
SMT1500C, SMT1500CUS, and SMT1500CNC	RBC7	
SMT2200C, SMT2200CUS, SMT3000C, SMT3000CUS	RBC55	Lead acid, 2 modules, 48 Vdc

Operation

Connect Equipment to the UPS

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.

⚠ CAUTION

RISK OF ELECTRIC SHOCK

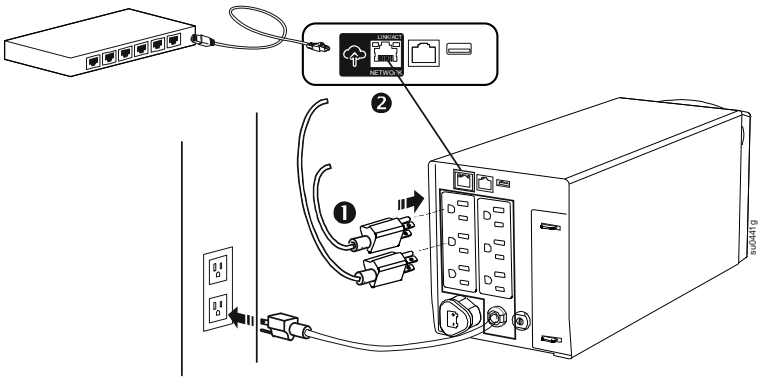
- Adhere to all local and national electrical codes.
- Wiring should be performed by qualified electrician.
- Always connect the UPS to a grounded outlet.

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

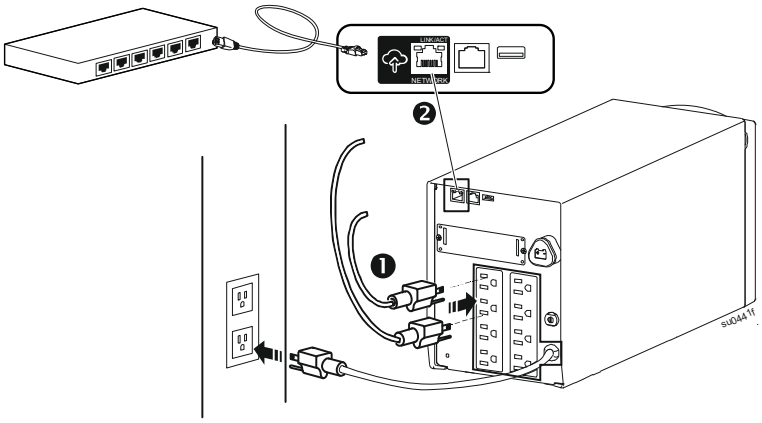
1. Connect equipment to the outlets in the rear of the UPS (Refer to ❶ in illustration below). Some models are equipped with switched outlet groups. Refer to the “Outlet Groups Configuration” on page 20 of this manual for further instructions on the use of switched outlet groups.
2. Connect the SmartConnect Ethernet port to your nearest network switch using the cable provided (Refer to ❷ in illustration below). SmartConnect features vary by terms of use.
3. Connect the UPS input to AC power.
   NOTE: Once power is connected the display will be active.
4. Press the UPS ON/OFF key on the UPS display to turn on the UPS output.

   NOTE: The **Online** LED will light green when the output is on.
5. When the UPS is powered on for the first time the display screen displays the Setup Wizard and asks a number of basic set-up questions. They can be answered simply by using the UP/DOWN selection and ENTER keys on the Front panel display.
6. Log onto www.smartconnect.apc.com or scan the QR code to launch the registration process. The website includes instructions to setup your on-line account, activate your warranty and begin monitoring your UPS remotely. Features vary with terms of use.

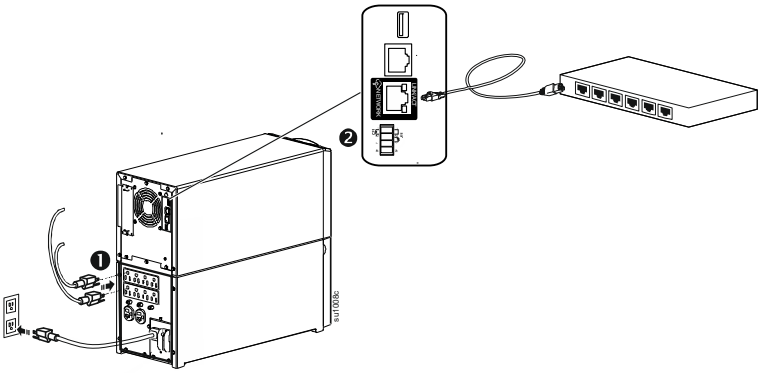
SMT750C and SMT750CUS



SMT1000C, SMT1000CUS, SMT1500C, SMT1500CUS, and SMT1500CNC



SMT2200C, SMT2200CUS, SMT3000C and SMT3000CUS



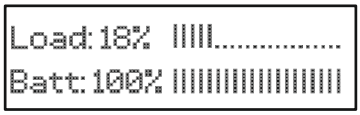
NOTE: By connecting this product to the Internet using the SmartConnect Ethernet Port, you are agreeing to SmartConnect Terms of Use, as found at https://smartconnect.apc.com. Feature availability varies with terms of use. Schneider Electric Data Privacy Policy can also be found at https://smartconnect.apc.com.

Display Panel

The display consists of the following keys and indicators:

UPS ON/OFF 	This button is used to turn the UPS output power on and off.
Quick status LEDs	
	The **Online** LED illuminates **green** when UPS output is turned on and is operating on AC power.
	The **On Battery** LED illuminates **orange** and the unit will continue to emit a series of short beeps indicating that the UPS is operating on battery power.
	The **Error Detected** LED will illuminate **red** if the unit detects an internal error. The display screen may also indicate an error message or code.
	The **Replace Battery** LED illuminates **red** when the UPS battery does not pass self test and requires replacement.
ESCAPE 	The ESCAPE key always returns the display to the previous screen. It is used to exit the various display menus.
ENTER 	The ENTER key is used to confirm a selection and/or enter a menu.
UP/DOWN **selection keys** 	The UP/DOWN selection keys are used to navigate through each menu selection.

The display has two main display/menu options – standard and advanced.



su0983a

Standard Menu Display

su0984a

Advanced Menu Display

NOTE: The standard menu is the default setting and does not contain all of the menus and attributes of the advanced menu. The advanced menu automatically scrolls through multiple screens.

Using the display

These Smart-UPS models are equipped with an intuitive and configurable LCD display. This display complements the software interface as they convey similar information and either may be used to configure the UPS settings.

Standard menus

The Standard menus are the most commonly used menus. The following is a list of some items displayed in this menu mode. Visit se.com for additional details.

Menu	General Functions	
Status	**View UPS information:**	
	• Operating Mode	• Battery Temperature
	• Efficiency	• Input Voltage
	• Load Power	• Output Voltage
	• Load VA	• SmartConnect
	• Battery Charge state	• Probe 1, Probe 2, when NMC and sensor probes are installed
	• Estimated Runtime	
Configuration	**Configure UPS settings:**	
	• Language	• Audible Alarm
	• Green Mode	• Display (Auto Dim, Auto Off, Always On)
	• Local Power Quality: Good, Fair, Poor	• Reset to Factory Default
	• Menu Type: Standard or Advanced	• SmartConnect Control
		• Install FW
Test & Diags	**Perform UPS tests and diagnostic functions:**	
	• UPS Self Test	
	• UPS Alarms Test	
	• Calibration Test	
About	**View UPS information:**	
	• UPS Model	• Replace Battery by
	• UPS Part No.	• Running UPS FW
	• UPS Serial No.	• Available UPS FW
	• UPS Manufacture Date	• UPS MAC
	• Battery Part No.	• UPS IP Address
	• Battery Install Date	• UPS Product Key
		• SmartSlot Card (if installed)

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 UPS information:**	
	• Operating Mode	• Battery Voltage
	• Efficiency	• Battery Temperature
	• Load Power	• Input Voltage
	• Load VA	• Output Voltage
	• Load Amps	• Outlet Groups
	• Load Energy	• SmartConnect
	• Battery Charge State	• Probe 1, Probe 2, when NMC and sensor probes are installed
	• Estimated Runtime	

Menu	General Functions	
Control	**Control the Main and Switched Outlet Group to turn on, turn off, shutdown, or reboot:** • UPS Control • Outlet Group Control	
Configuration	**Configure advanced UPS settings:** • Language • Output Voltage • Green Mode • Local Power Quality • Menu Type • Audible Alarm • Display • Sensitivity • Low Transfer • High Transfer • Low Battery Setting • Auto Self Test	• Reset Energy Meter • Enter Setup Wizard • Reset to Factory Defaults • Site Wiring Fault • Configure Main Group Outlets • Configure Group Outlets (if Switched Outlet is available) • ModBus Settings • SmartConnect Control • UPS IP Address Setting • NMC IP Address Settings (if NMC is available) • Install FW? (only available if a firmware update is available)
Test & Diag	**Perform UPS tests and diagnostics functions:** • UPS Self Test • UPS Alarms Test • Calibration Test	
Logs	View the error log for information about UPS errors that have occurred.	
About	**View UPS information:** • UPS Model • UPS Part No. • UPS Serial No. • UPS Manufacture Date • Battery Part No. • Battery Install Date	 • Replace Battery by • Running UPS FW • Available UPS FW • UPS MAC • UPS IP Address • UPS Product Key • SmartSlot Card (if installed)

Configuration

UPS Settings

General Settings

Configuration settings may be changed at any time using the display interface or PowerChute™ software.

Setting	Factory Default	Options	Description
High Transfer	127 Vac	127 Vac - 136 Vac	To avoid unnecessary battery usage, set the transfer point higher if the AC voltage is chronically high and the connected equipment is known to work under this condition. The Power Quality setting will automatically change this setting. **NOTE:** Use the Advanced Menus to configure this setting.
Low Transfer	106 Vac	97 Vac - 106 Vac	Sets the transfer point lower if the AC voltage is chronically low and the connected equipment can tolerate this condition. This setting may also be adjusted using the power quality setting. **NOTE:** Use the Advanced Menus to configure this setting.
Sensitivity	Normal	• Normal • Reduced • Low	Selects the level of sensitivity to power events that the UPS will tolerate. • **Normal**: The UPS will go on battery power more often to provide clean power supply to the connected equipment. • **Low**: The UPS will tolerate more fluctuations in power and will go on battery power less often. If the connected load is sensitive to power disturbances, set the sensitivity to Normal.
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 buttons are pressed.
Auto Self Test	On start-up and every 14 days since the last test	• 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	Restores the UPS factory default settings.
Site Wiring Fault	Enable	• Enable • Disable • Can Ack	Sets the Site Wiring Fault detection to Enable, Disable or User Can Acknowledge
Output voltage	120 V	• 120 Vac • 110 Vac • 125 Vac	Selects the output voltage. This is only settable when the UPS is turned off.

Setting	Factory Default	Options	Description
Green Mode	Enable	• Enable • Disable	This will enable or disable Green mode function. Green Mode conserves energy while the UPS is operating online.
SmartConnect Control	Enable	• Enable • Disable	This will permit remote configuration changes.
Low Battery Setting	150 sec	Set the value in seconds	The UPS will emit an audible alarm when the remaining runtime has reached this level.

Outlet Groups Configuration

Overview

The Main Outlet Group and the Switched Outlet Group can be configured to independently turn off, turn on, shut down, and reboot connected equipment.

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

- 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 in sequence, and automatically restore power in sequence when utility power becomes available
- Reboot: Shut down and restart

In addition, the Main Outlet Group and the Switched 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 Switched Outlet Groups are not configured, all of the outlets on the unit will still provide battery back-up power.

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 run-time has been exhausted.

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

Setting	Factory Default	Options	Description
Name String Outlet Group	Outlet Group 1	Edit these names using an external interface, such as the Network Management Card Web interface.	
UPS Name String	UPS Outlets		
Turn On Delay	0 sec	Set the value in seconds	The amount of time the Switched Outlet Group will wait between receiving the command to turn on and the actual startup.
Turn Off Delay	• 0 sec (UPS Outlets) • 90 sec (Switched Outlet Groups)	Set the value in seconds	The amount of time the 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 Time	0 sec	Set the value in seconds	The amount of battery runtime that must be available before the UPS or the Switched Outlet Group will turn on.

Setting	Factory Default	Options	Description
Load Shed On Battery	Disabled	• Shutdown with Delay • Shutdown immediately • Turn off immediately • Turn off with delay • Disabled	When the unit switches to battery power, the UPS can disconnect power to the Switched Outlet Group to save runtime. To configure this delay time, use the *Load Shed Time when On Battery* setting.
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	• Shutdown with delay • Shutdown immediately • Turn off immediately • Turn off with delay • Disabled	When the battery runtime falls below the specified value, the Switched Outlet Group will turn off. Configure this time using the *Load Shed On Runtime Remaining* setting.
Load Shed On Runtime Remaining	Disabled	Set the value in seconds	When the remaining runtime reaches this level, the Switched Outlet Group will turn off.
Load Shed on Overload	Disabled	• Disabled • Enabled	In the event of an overload (greater than 100% output power), the Switched Outlet Group will immediately turn off to conserve power for essential loads. The Switched Outlet Group will only turn on again with a manual command.

Modbus settings

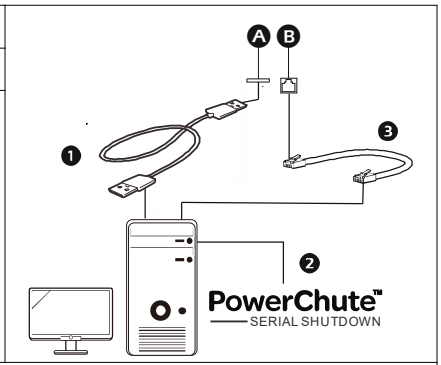
Setting	Factory Default	Options	Description
Slave ID	1	1- 223	Sets the Modbus slave address of UPS.
Ser + USB	Disable	• Enable • Disable	Enables or disables UPS Modbus protocol over serial and USB ports.
TCP Settings • TCP Protocols	Disable	• Disable • Read-Only • Read-Write	Enables or disables UPS Modbus TCP/IP protocol provided by the embedded SmartConnect Ethernet port. • **Disable:** Disables UPS Modbus TCP/IP protocol • **Read-Only:** Modbus master over TCP/IP protocol is only allowed to get UPS status. • **Read-Write:** Modbus master over TCP/IP protocol is allowed to get UPS status and control the UPS. The port number of UPS Modbus TCP/IP protocol is fixed at 502.
• Master IP Addr	000.000.000.000	A valid IPv4 address	Specifies the IPv4 address of the Modbus master that will allow connection to the UPS via Modbus TCP/IP protocol The *Master IP Addr* when set as 000.000.000.000 will allow connection of external Modbus master with any IP address. When not set as 000.000.000.000, only the Modbus master with the specified IP address is allowed to connect to the UPS. Example: *Master IP Address* is set to 192.168.0.10, only Modbus master with IP address 192.168.0.10 could connect to the UPS.
Install FW?	Don’t Install	• Next off (Updates the UPS Firmware next time that the UPS is turned off) • Now (Updates the UPS firmware immediately without interrupting operations) • Don't Install	Firmware update: this only appears when new firmware is available in the flash memory of the UPS and is ready to be installed.

UPS IP Address settings

Setting	Factory Default	Options	Description
UPS IP Address Mode	DHCP	• DHCP • Manual	Selects the IP address configuration mode of UPS embedded SmartConnect Ethernet port: • **DHCP:** UPS will automatically configure its IPv4 address via DHCP protocol. • **Manual:** Manually assigns a static IPv4 address to UPS
IP Address	000.000.000.000	A valid IPv4 address	This is the IPv4 address assigned to the embedded SmartConnect Ethernet port. When **DHCP** IP address mode is selected, it will display the UPS IPv4 address assigned by DHCP server. When **Manual** IP address mode is selected, you need to manually specify a static IPv4 address.
Subnet Mask	000.000.000.000	A valid IPv4 subnet mask	Assigns the subnet mask of the network where UPS IPv4 address belongs. When **DHCP** IP address mode is selected, it will display the subnet mask assigned by DHCP server. When **Manual** IP address mode is selected, you need to manually specify the subnet mask of the network where the specified static IPv4 address belongs.
Default Gateway	000.000.000.000	A valid IPv4 address	This is the IPv4 address of the host from where the UPS sends data to another network or Internet. When **DHCP** IP address mode is selected, it will display the default gateway assigned by DHCP server. When **Manual** IP address mode is selected, you need to manually specify the IPv4 address of default gateway.
DNS Server 1	000.000.000.000	A valid IPv4 address	The IPv4 address of first domain name server (DNS) the UPS uses to resolve host names to IPv4 addresses. When **DHCP** IP address mode is selected, it will display the IPv4 address of the first DNS server assigned by DHCP server. When **Manual** IP address mode is selected, you need to manually specify the IPv4 address of the first DNS server.
DNS Server 2	000.000.000.000	A valid IPv4 address	The IPv4 address of second domain name server (DNS) the UPS uses to resolve host names to IPv4 addresses *(only when UPS is not able to resolve IP address through first domain name server)*. This setting is optional. When **DHCP** IP address mode is selected, it will display the IPv4 address of the second DNS server assigned by DHCP server. When **Manual** IP address mode is selected, you can manually specify the IPv4 address of the second DNS server or leave it as 000.000.000.000.

Connect and Install Management Software

PowerChute UPS Management Software (PowerChute Serial Shutdown) can be installed in Smart-UPS for unattended operating system shutdown, UPS monitoring, UPS control and energy reporting. The following diagram is a representation of a typical server installation.

Ⓐ	**USB Port**
Ⓑ	**Serial Port**
	
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 latest version of the 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 is also available for additional communication options with serial cable. **NOTE:** Serial port and USB port cannot be used at the same time.

Even more communication options are available via the built-in Smartslot. Refer www.se.com for more information.

Network Management Card

NOTE: This feature is available only in SMT1500CNC.

For installing the NMC in other models, refer to the user manual provided with the NMC. The user manual is also available on our Web site www.se.com.

Introduction

The Schneider Electric Network Management Card (NMC) enables essential and secure remote monitoring and management of your UPS. Connecting your Smart-UPS will improve the availability, resiliency and efficiency of your UPS and the IT workloads it supports.

To ensure your Network Management Card has the latest firmware which is independently certified to IEC 62443-4-2 standard, your NMC includes a 1-year Secure NMC System (SNS) subscription.

For further information including the latest documentation, visit www.se.com/secure-nmc

Features

The Network Management Card:

- Connects to the network through a 10/100/1000 Base-T Network Port.
- Provides UPS control and self-test scheduling features.
- Provides data and event logs.
- Enables you to set up notifications through event logging, e-mail, Syslog and SNMP traps.
- Provides support for PowerChute™ Network Shutdown for unattended graceful shutdown of your physical servers, virtual machines and hyperconverged infrastructure.
- Supports using a Dynamic Host Configuration Protocol (DHCP) or BOOTstrap Protocol (BOOTP) server to provide the network (TCP/IP) values of the NMC.
- Provides the ability to export a user configuration (.ini) file from a configured NMC to one or more unconfigured NMCs without converting the file to a binary file.
- Provides a selection of security protocols for authentication and encryption.
- Communicates with EcoStruxure™ IT Expert or Data Center Expert for enhanced monitoring and management capabilities.
- Provides two USB ports, which support upgrading the UPS firmware from a USB flash drive.
- Supports two universal input/output ports to which you can connect:
  - Temperature probe, AP9335T (supplied).
  - Temperature/humidity sensor, AP9335TH (optional).
  - Relay input/output connector that supports two input contacts and one output relay using the Dry Contact I/O Accessory, AP9810 (optional).

Network Management Card Settings

NOTE: These settings are available only on SMT1500CNC.

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

SmartConnect

SmartConnect Ethernet Port allows you to monitor the health and status of your UPS from any device connected to the Internet. Availability of features varies by terms of use. Access the terms of use at https://smartconnect.apc.com.

Refer to EcoStruxure™ IT SmartConnect below for details.

EcoStruxure™ IT SmartConnect

The Web Portal allows you to remotely view the status of your UPS, receive automatic notifications about UPS events, and firmware updates. The features may vary with terms of use. Visit https://smartconnect.apc.com to learn more.

By connecting this product to the Internet using the SmartConnect Ethernet port, you are agreeing to the SmartConnect Terms of Use and Data Privacy Notice, as found at https://smartconnect.apc.com/terms-and-privacy. The Schneider Electric Data Privacy Policy can also be found at https://smartconnect.apc.com/terms-and-privacy.

Log onto https:/smartconnect.apc.com or scan the QR code to begin the registration process. The QR code is located on the rear panel of the UPS.

For instructions on how to register your SmartConnect-compatible UPS, visit https://smartconnect-support.apc.com.

Emergency Power Off

NOTE: This feature is available only in SMT2200C, SMT2200CUS, SMT3000C, and SMT3000CUS models.

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

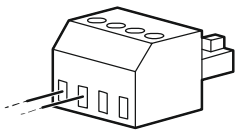
⚠ CAUTION

RISK OF ELECTRIC SHOCK

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

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

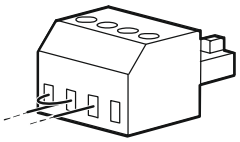
Normally open contacts



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 the connected load will not receive power.

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 the connected load will not receive power.

NOTE: Pin 1 is the power source for the EPO circuit, it provides a few milliAmps 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 unit has not been turned on.	Press the UPS ON/OFF key once to turn on the UPS.
The UPS is not connected to AC power.	Be sure the power cable is securely connected to the unit and to the AC 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 AC voltage.	Check the AC power supply to the UPS by plugging in a table lamp. If the light is very dim, check the AC voltage.
The battery connector plug is not securely connected.	Be sure that all battery connections are secure.
There is an internal UPS error detected.	Do not attempt to use the UPS. Unplug the UPS and have it serviced immediately.
The UPS is operating on battery, while connected to input AC 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 AC voltage display. If acceptable to the connected equipment, reduce the UPS sensitivity.
UPS is emitting intermittent beeps.	
The UPS is operating normally.	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 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 indicator has 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 AC power is restored.
The Error LED is illuminated. The UPS displays an error message and emits a constant beeping sound.	
Internal UPS error detected.	Do not attempt to use the UPS. Turn the UPS off and have it serviced immediately.
The Replace Battery icon is illuminated and the UPS beeps for one minute every five hours.	
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 Replace Battery icon is flashing and the UPS beeps once every 2 seconds.	
The replacement battery is not properly connected.	Be sure that the battery connector is securely connected.
The UPS displays a site wiring error message.	
Wiring errors detected include missing ground, hot-neutral, polarity reversal, and overloaded neutral circuit.	If the UPS indicates a site wiring error, have a qualified electrician inspect the building wiring.

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.

Service

1. If the unit requires service, do not return it to the dealer. Follow these steps:
2. Review the Troubleshooting section of the manual to eliminate common problems.
3. If the problem persists, contact Customer Support through 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 LCD display 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. Refer to the our Web site for country specific instructions.
4. 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.
5. A**lways 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, but must be disconnected.
6. Write the RMA# provided by Customer Support on the outside of the package.
7. Return the unit by insured, prepaid carrier to the address provided by Customer Support.

Limited Factory 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 https://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 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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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 our 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.

Schneider Electric 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 to access documents in the Schneider Electric Knowledge Base and to submit customer support requests.
  - www.se.com (Corporate Headquarters)

    Connect to localized Schneider Electric web sites for specific countries, each of which provides customer support information.
  - www.se.com/support/

    Global support searching Schneider Electric Knowledge Base and using e-support.
- Contact Schneider Electric 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 the Schneider Electric representative or the distributor from whom you purchased your APC product.

Select models are ENERGY STAR® qualified.

For more information on your specific model go to www.se.com.

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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.

EN JPS29631