



by Schneider Electric

Installation Guide Smart-UPS X 750/1000/1500 VA Rack-Mount 2U with APC™ SmartConnect Port

Important Safety Instructions

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

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



The addition of this symbol either to a “Danger” or “Warning” 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



Safety and General Information

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

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

- Adhere to all local and national electrical codes.
- 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 equipment is intended for indoor use only.
- 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.
- The equipment is heavy. Always practice safe lifting techniques adequate for the weight of the equipment.
- 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.

Battery Safety



CAUTION

RISK OF HYDROGEN SULPHIDE GAS AND EXCESSIVE SMOKE

- 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 Easy 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, or when there is evidence of electrolyte leakage. Power off the Easy UPS, unplug it from the AC input, and disconnect the batteries. Do not operate the Easy UPS until the batteries have been replaced.

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

*Contact APC by Schneider Electric Worldwide Customer Support to determine the age of the installed battery modules.

- 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.
- 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. 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.

Deenergizing safety

The UPS contains internal batteries and may present a shock hazard even when disconnected from the branch circuit (mains). Before installing or servicing the equipment check that the:

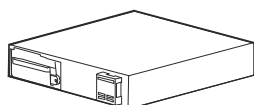
- Input circuit breaker is in the **OFF** position.
- Internal UPS batteries are removed.

Electrical safety

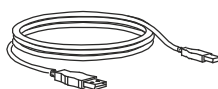
- Do not handle any metallic connector before power has been disconnected.
- For models with a hardwired input, the connection to the branch circuit (mains) must be performed by a qualified electrician.
- 230 V models only: In order to maintain compliance with the EMC regulations, output cords and network 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.
- If provided, connect the ground cable between the external battery pack(s) and the UPS.
- 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.

Inventory

All models



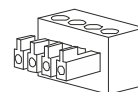
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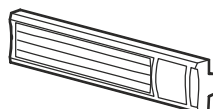
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(1)



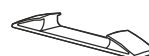
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(4)



(1)



(2)



PowerChute™ software
download guide (1)



(1 pair)

Rack-Mount brackets



(1)

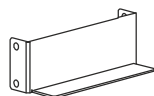


(1)

750/1000 VA models



(2)



(2)

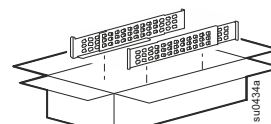


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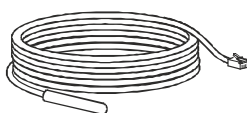
(2)

1500 VA models



(1 pair)

Models with pre-installed network cards



Installation

Connect the battery

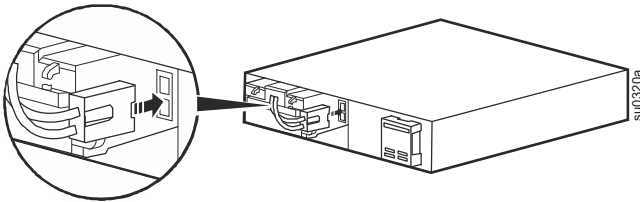


CAUTION

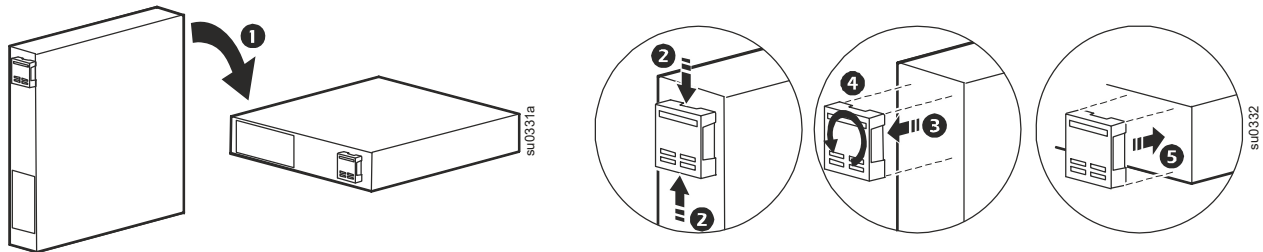
DAMAGE TO EQUIPMENT OR PERSONNEL

- The equipment is heavy. Always practice safe lifting techniques adequate for the weight of the equipment.
- Connect the battery after installing the UPS in a rack.

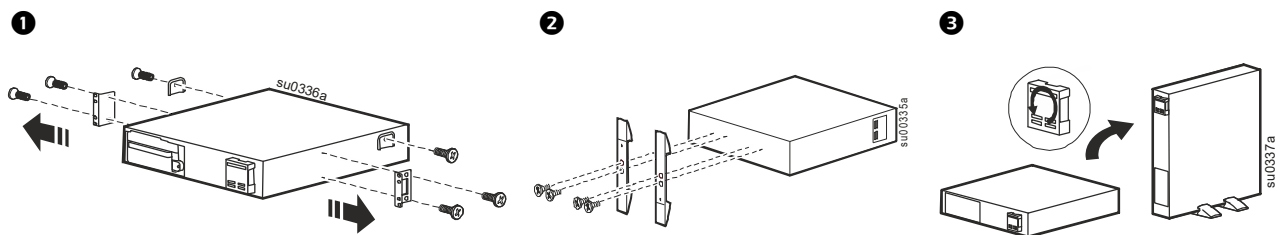
Failure to follow these instructions could result in equipment damage and minor or moderate injury.



Tower to rack-mount conversion 750/1000 VA

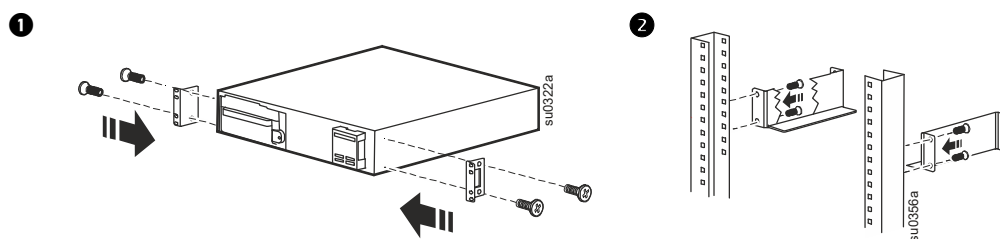


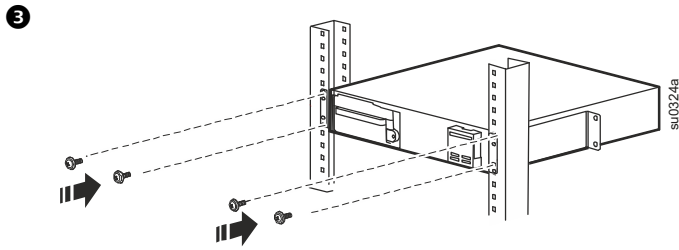
Rack-mount to tower conversion 1500 VA



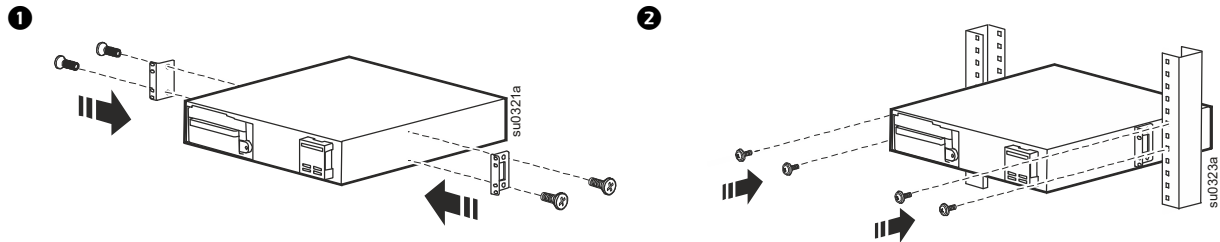
Two post rack

Front mount installation 750/1000 VA



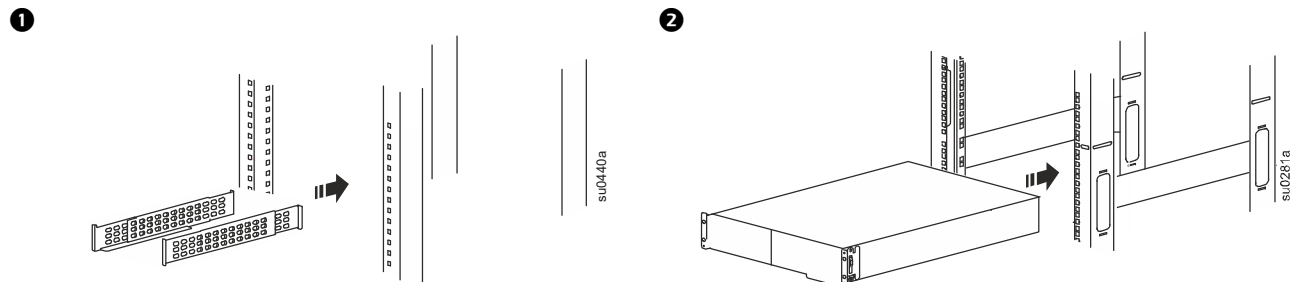


Center mount 750/1000/1500 VA



Four post rack installation 1500 VA

Use the APC Four Post Rail Kit (included with 1500 VA models only.)



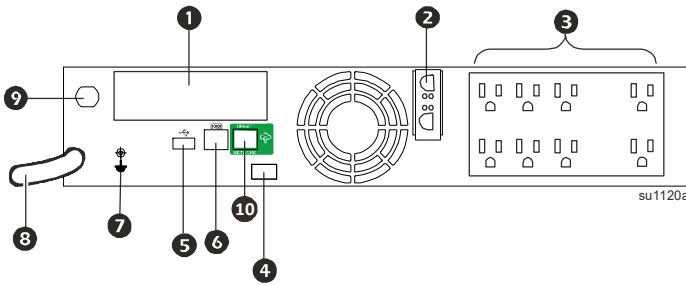
Install the bezel and rotate the logo



Start Up and Configuration

Overview

120 Vac



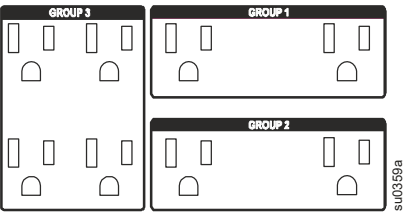
- ❶ SmartSlot (except NC models)
- ❷ External battery pack connector
- ❸ Outlets
- ❹ EPO connector
- ❺ USB port - Use this port to connect to a computer for monitoring or gracefully shutting down the UPS using PowerChute software. Refer to the Operation Manual for details.
- ❻ Serial port - Use this serial port for monitoring the UPS. Refer to the Operation Manual for details.
- ❼ Chassis ground screw
- ❽ UPS input
- ❾ Circuit breaker
- ❿ SmartConnect Ethernet Port (Features vary with terms of use.)
NOTE: Refer to the Operation Manual for details.

Controllable outlet groups

The outlets on the UPS are configured into groups. To configure the controlled outlet features, navigate to: **Main Menu > Control > Outlet1 Control**.

SKU	Controllable Outlet Group
750 VA	1
1000 VA	1 & 2
1500 VA	1, 2, & 3

Examples of switched outlet groups



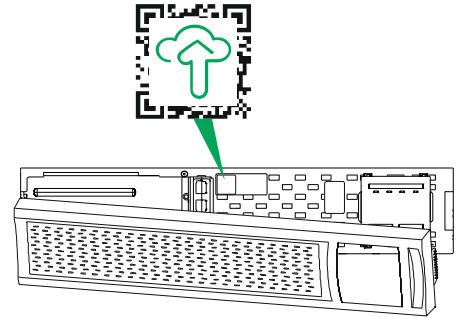
EcoStruxure™ IT SmartConnect

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 smartconnect.apc.com to learn more.

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

Log onto 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 smartconnect-support.apc.com.



Electrical connections

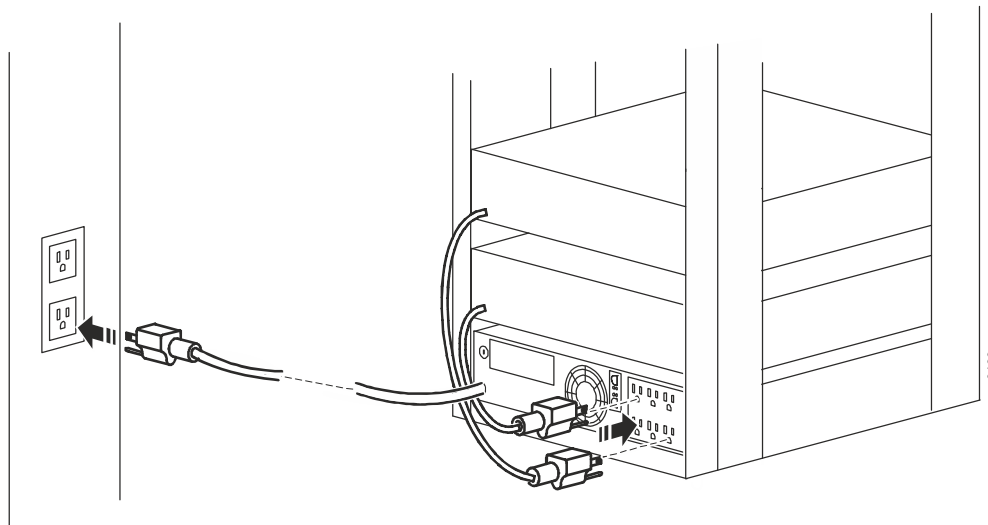


CAUTION

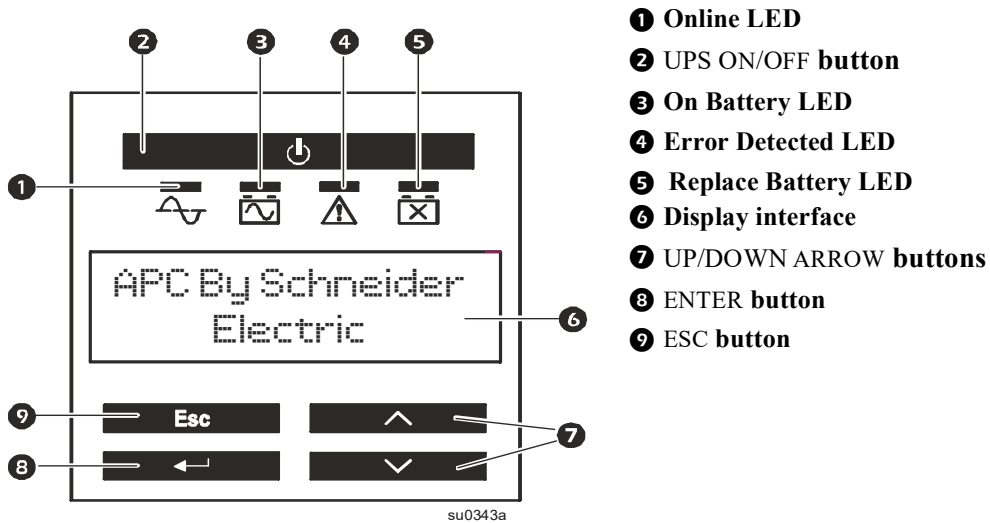
HAZARD OF ELECTRICAL SHOCK

- 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.

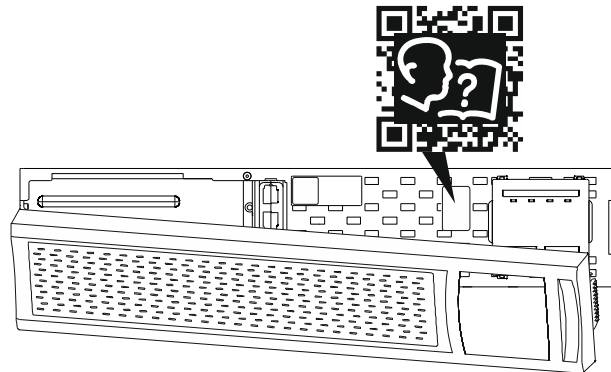


Display Interface



Location of QR Code for Operation Manual

Locate the QR code and scan it for downloading the Operation Manual.



Select models are ENERGY STAR® qualified.

For more information on your specific model, visit APC by Schneider Electric web site, www.apc.com.