



by Schneider Electric

Installation Guide Smart-UPS™ 1200/1500 VA 100/120/230 Vac Rack-Mount 1U

Important Safety Messages

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

Read the instructions carefully. 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 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.



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

⚠ 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



Hardwire safety

- Check that all branch circuit (mains) and low voltage (control) circuits are deenergized, and locked out before installing cables or making connections, whether in the junction box or to the UPS.
- Wiring by a qualified electrician is required.
- Check national and local codes before wiring.
- Strain relief is required for all hardwiring (supplied with select products). Snap in type strain reliefs are recommended.
- All openings that allow access to UPS hardwire terminals must be covered. Failure to do so may result in personal injury or equipment damage.
- Select wire size and connectors according to national and local codes.

Safety and General Information

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

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

- Adhere to all national and local electrical codes.
- This UPS is intended for indoor use only.
- Do not operate this UPS in direct sunlight, in contact with fluids, or where there is excessive dust or humidity.
- Be sure the air vents on the UPS are not blocked. Allow adequate space for proper ventilation.
- The battery typically lasts for three to five years. Environmental factors impact battery life. Elevated ambient temperatures, poor quality utility power, and frequent short duration discharges will shorten battery life.
- Connect the UPS power cable directly to a wall outlet. Do not use surge protectors or extension cords.
- The batteries are heavy. Remove the batteries prior to installing the UPS in a rack.

Inventory

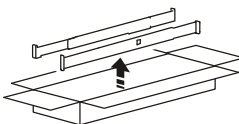
All models



Documentation
CD



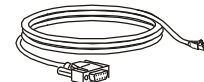
Bezel



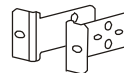
1U Rail Kit
with rails, cleats, screws



Rack-Mount brackets
100 Vac models



Serial cable



Rack-Mount brackets
120/230 Vac models

120 Vac/230 Vac models



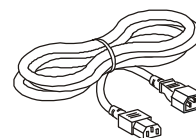
USB cable

120 Vac/230 Vac models



Software CD

230 Vac models



2 Power cords

Installation

⚠ CAUTION

RISK OF FALLING EQUIPMENT

- The equipment is heavy. 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.

Remove the battery

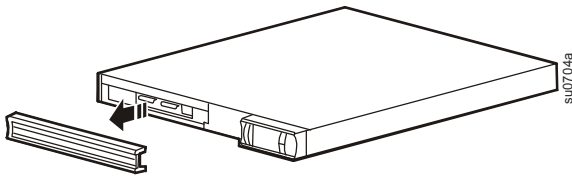
⚠ CAUTION

RISK OF HYDROGEN SULPHIDE GAS AND EXCESSIVE SMOKE

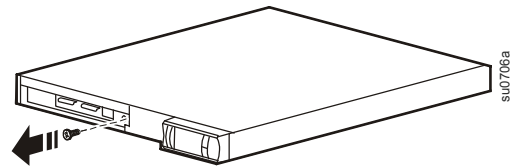
- Replace the battery at least every 5 years.
- Replace the battery immediately when the UPS indicates battery replacement is necessary.
- Replace battery at the end of its service life.
- Replace batteries with the same number and type of batteries as originally installed in the equipment.
- Replace the battery immediately when the UPS indicates a battery over-temperature condition, or UPS internal over-temperature, or when there is evidence of electrolyte leakage. 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 can result in minor or moderate injury and equipment damage.

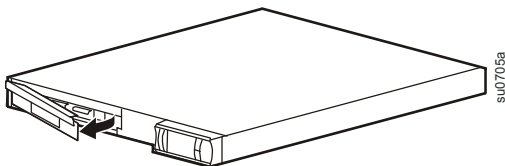
- ❶ Remove the bezel.



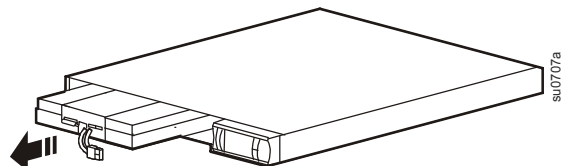
- ❷ Remove the screw that secures the battery compartment door.



- 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

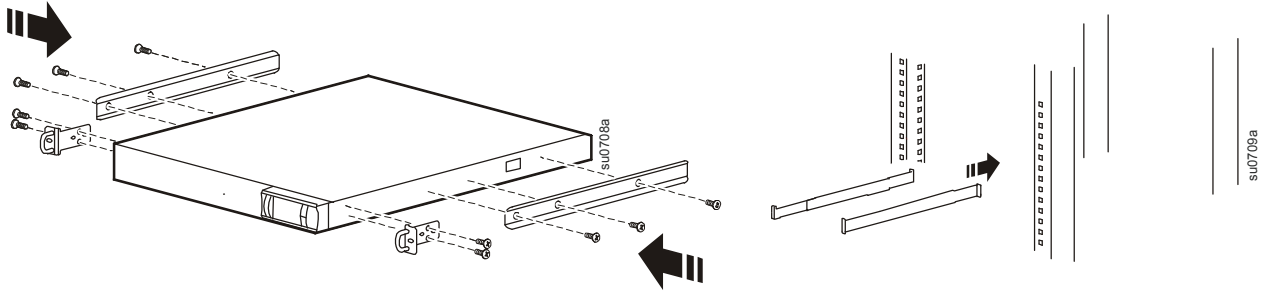
CAUTION

DAMAGE TO EQUIPMENT OR PERSONNEL

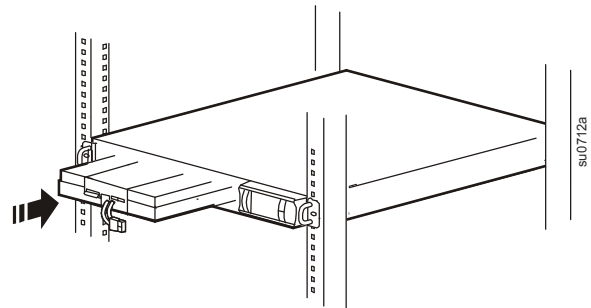
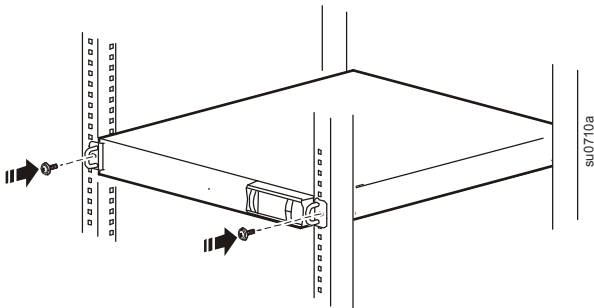
- When installing equipment in a rack, always install load devices at the bottom of the rack.
- The UPS should always be installed above the peripheral devices in rack or stack configurations.

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

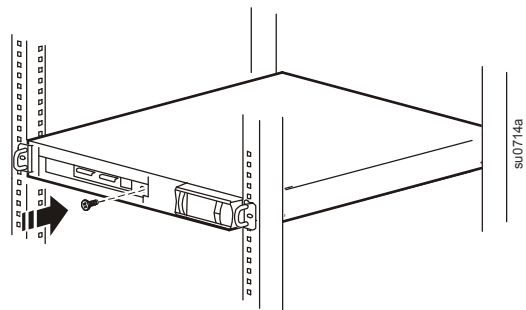
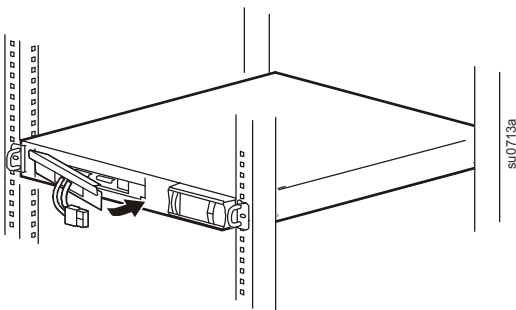
- 1 Secure the rail cleats and brackets to the UPS. Use two screws for each rack-mount bracket and three screws for each rail cleat.
- 2 Install the 1U Rail Kit included with the UPS. Refer to the installation instructions provided with the rail kit.



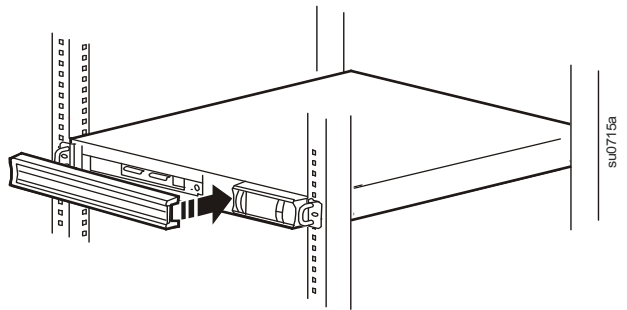
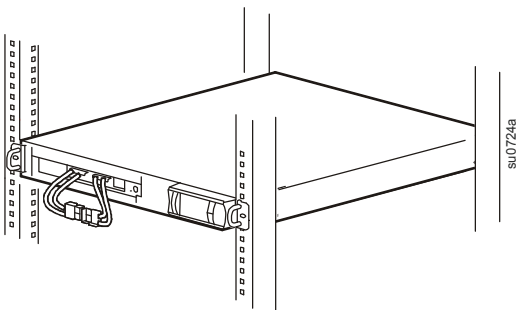
- 3 Slide the UPS into the rack. Secure the brackets to the rack using the screws provided.
- 4 Slide the battery into the UPS.



- 5 Install the battery compartment door.
- 6 Secure the door with the screw previously removed.



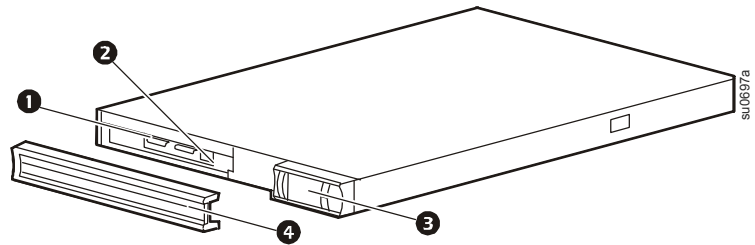
- 7 Secure the two battery connectors as shown in the diagram below.
- 8 Install the bezel on the front of the UPS.



Overview and Start Up

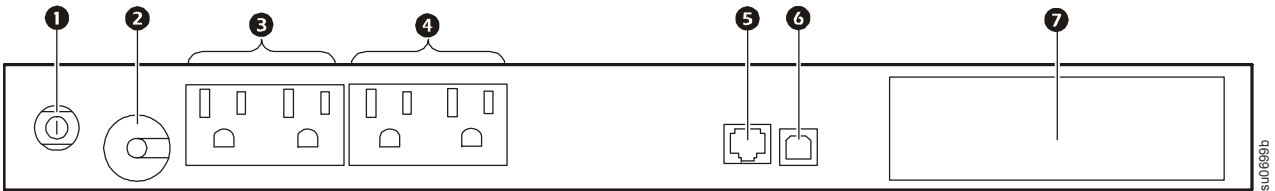
Front panel

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

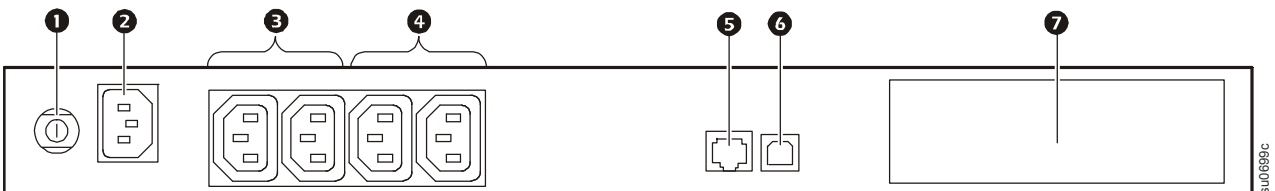


Rear panels

1200/1500 VA 100/120 Vac



1500 VA 230 Vac



- ❶ Circuit breaker/Overload protection
- ❷ UPS input
- ❸ Controlled outlet group 1
- ❹ Controlled outlet group 2
- ❺ RJ45 connector - serial UPS monitoring port
- ❻ USB port
- ❼ SmartSlot for optional accessory card

Electrical connections

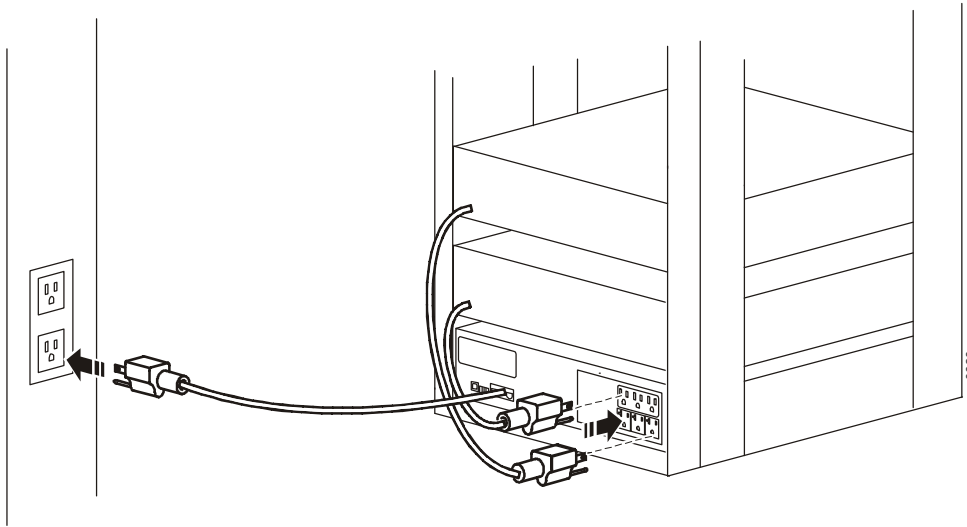
⚠ CAUTION

RISK OF EQUIPMENT DAMAGE

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

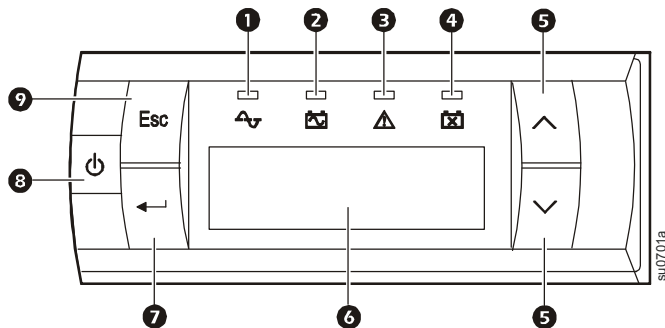
Failure to follow these instructions can result in equipment damage.

Outlet type and location may vary.



Display Interface

- 1 Online LED
- 2 On Battery LED
- 3 Alert LED
- 4 Replace Battery LED
- 5 UP/DOWN arrow buttons
- 6 Display screen
- 7 ENTER button
- 8 UPS Output ON/OFF button
- 9 ESCAPE button



Select models are ENERGY STAR[®] qualified.
For more information go to www.apc.com.