

# Important Safety Information SAVE THIS GUIDE

This Safety Guide contains important instructions that should be followed during installation and maintenance of the APC<sup>TM</sup> by Schneider Electric equipment.

It is intended for APC by Schneider Electric customers who setup, install, relocate, or maintain APC by Schneider Electric equipment. Refer to the product manual for more information.

Read, understand, and follow ALL safety instructions contained in this guide. Failure to follow safety instructions and warnings could result in equipment damage, serious injury, or death.

Changes and modifications to this unit not expressly approved by Schneider Electric IT Corporation could void the warranty.

## **Product Handling Guidelines**



<18 kg <40 lb



18-32 kg 40-70 lb



32-55 kg 70-120 lb



>55 kg >120 lb





- Adhere to all national and local electrical codes.
- Do not work alone under hazardous conditions.
- The equipment is intended for indoor use only.
- Do not operate the 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.
- Always install external battery packs at the bottom in rack-mount configurations. The UPS must be installed above the external battery packs.
- Always install peripheral equipment above the UPS in rack-mount configurations.

### **Electrical safety**

- Do not handle any metallic connector before power has been disconnected.
- 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.
- 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 for products sold in Europe, 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.

# **Deenergizing safety**

- The UPS may present a shock hazard even when disconnected from AC and DC power.
- The AC and DC connectors may be energized by remote or automatic control at any time.
- Before installing or servicing the equipment check that the:
  - Input circuit breaker is in the **OFF** position or the equipment is disconnected from the AC source.
  - External battery packs are disconnected.

## **Battery safety**

- The battery typically lasts for five to ten 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.
- Replace batteries immediately when the unit indicates battery replacement is necessary.
- Servicing of user replaceable batteries should be performed or supervised by personnel knowledgeable about batteries and required precautions.
- When replacing batteries, replace with the same number and type of batteries as originally installed in the equipment.
- APC by Schneider Electric uses Lithium Ion batteries. Under normal use and handling, there is no contact with the internal components of the battery.
- Do not drive nails into the battery pack.
- Do not strike the battery pack with a hammer.
- Do not stand on the battery pack.
- Do not place or use the battery pack near heat or fire.
- Do not use a dropped, damaged or deformed battery pack.
- Do not use the battery pack to power other equipment.
- CAUTION: Before installing or replacing the batteries, remove conductive jewelry such as chains, wrist watches and rings. High energy through conductive materials could cause severe burns.
- CAUTION: Do not dispose of battery pack in a fire. The batteries may explode.
- CAUTION: Do not open or tamper with the battery enclosure. Doing so will expose the cell terminals which pose an energy hazard.
- 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.

### **General information**

- UPS models will recognize external battery packs connected to the UPS. See product manual for details. **Note:** For each external battery pack added, recharge time will be increased.
- The model and serial numbers are located on a small, rear panel label. For some models, an additional label is located on the chassis under the front bezel.
- · Always recycle used batteries.
- Recycle the package materials or save them for reuse.