

# Battery Module Storage and Replacement (Symmetra® PX and Smart-UPS® VT)



**Warning:** Only trained persons familiar with the construction and operation of the equipment, as well as the electrical and mechanical hazards involved, may install and remove system components.



**Caution:** Wait until the system is ready to be powered up before installing Battery Modules in the UPS. Failure to do so can result in a deep discharge of the batteries and cause permanent damage (the time from the battery installation time till the UPS is powered up should not exceed 72 hours or 3 days).

### Directions for replacement



**Caution:** Do not mix battery units. Replace with same model.

### Battery Enclosures with four batteries in a row.

APC recommends that a whole battery module (one row of batteries) is replaced at the same time to ensure optimal run-time (see Example 1). However it is only necessary to replace two batteries at the same time according to Example 2 and 3 in the table below.

	Column A	Column B	Column C	Column D
<b>Example 1</b>	New	New	New	New
<b>Example 2</b>	New	New	Old	Old
<b>Example 3</b>	Old	Old	New	New




### Battery Enclosures with two modules in a row.

Replace both batteries in one row at the same time.

Column A	Column B
New	New

## How to store the battery modules

The battery modules must be stored indoors and with their protective packaging still in place.

		
Ambient temperature: -15° to 40°C/5°F to 104°F	Relative Humidity: 25-85% Non-condensing	Storage place free from vibration, dust, direct sunlight, and moisture.

Stored batteries should be recharged at regular intervals depending on the storage temperature:

Storage Temperature	Recharge interval
-15° to 20°C/5°F to 68°F	9 months
20° to 30°C/68°F to 86°F	6 months
30° to 40°C/86°F to 104°F	3 months

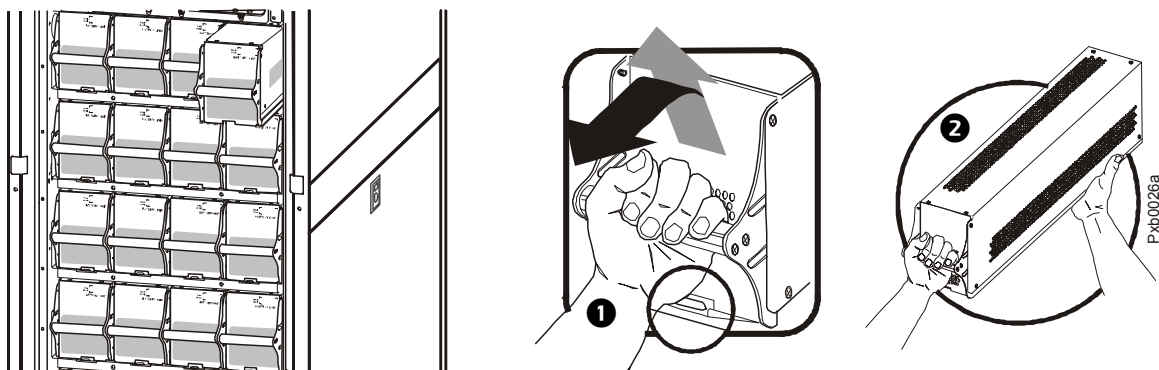


**Caution:** Do not store the batteries for more than 12 months.

## How to replace the battery modules



Use two people to lift components weighing between 18–32 kg/40–70 lb.



- ❶ Holding the handle, gently lift the battery unit and pull it halfway out. A lock mechanism prevents it from being pulled all the way out.
- ❷ Release the lock by pushing the battery unit upwards and pull the battery unit all the way out while supporting it
- ❸ Take the replacement battery unit and push it into the system.



**Note**

Allow for a 24-hour recharging period of the batteries after system start-up/battery replacement for battery monitoring data to become fully reliable.

