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Battery Life Expectancy

Most APC batteries should **last three to six years**. There are many factors which affect Battery life including environment and number of discharges. Below are some guidelines to ensure optimum life expectancy:

***Some APC Back UPS models may have a shorter battery life expectancy. Please reference the user's manual of your APC Back UPS to determine the exact battery life expectancy.









Temperature - The temperature of the battery within its environment will affect its capacity and therefore the available runtime. Capacity decreases at lower temperatures and increases at higher temperatures.

Age of the battery - A new battery will only reach its optimum capacity after a two or three discharge and charge cycles, plus as it ages its capacity will decrease, typically down to approximately 80% at the end of its life.

Temperature & battery life - Whilst the capacity of a battery will increase at higher temperatures its life will be reduced, typically by 50% for every 10 deg Celsius rise above 25 deg Celsius.

Recharging the battery - Whilst a battery will recharge to 90% capacity fairly quickly, it can take up to 72 hours to reach its full capacity again. This is because as the battery approaches its fully charged state it becomes more difficult to get energy back into the battery.

The frequency and depth of discharge cycles - The frequency and depth of discharge will affect the life and capacity of the battery, reducing with a higher number and depth of cycles.

The load itself - In particular the actual size of the load compared with the theoretical load.

The load characteristic - The runtime calculation is based on tests with resistive load and may differ with inductive or capacitive load.

Light load accuracy - The estimated runtime values quoted on the web are based on an algorithm which tends to be less accurate for light loads and long runtime applications.

Storage - When a battery is stored, be that within a UPS that is not connected or as a RBC, it will gradually lose capacity through self discharge, a situation which is accelerated at higher storage temperatures. So providing the storage period and temperature has not exceeded the typical battery manufactures specification the battery will return to near full capacity, but sufficient recharge time, 48 - 72 hours must be allowed for the capacity to be recovered. Typical maximum storage period is 12 months at 25 deg Celsius, 8 months at 30 deg Celsius and 4 months at 40 deg Celsius.