

# QUINT UPS-IQ Battery Cell replacement procedure

This procedure reviews how to replace an expired battery and to reset the battery life/performance functions.

The starting mode of this procedure should be that 24Vdc is applied to the input of the UPS and it is powered on.

| Battery Part number / Description |                          | Replacement Battery Cell |
|-----------------------------------|--------------------------|--------------------------|
| 2320296                           | UPS-BAT/VRLA/24DC/1.3AH  | Panasonic LC-R121R3P     |
| 2320306                           | UPS-BAT/VRLA/24DC/3.4AH  | Panasonic UP-RW1220P     |
| 2320319                           | UPS-BAT/VRLA/24DC/7.2AH  | Panasonic LC-R127R2P     |
| 2320322                           | UPS-BAT/VRLA/24DC/12AH   | Panasonic LC-RA1212P     |
| 2320335                           | UPS-BAT/VRLA/24DC/38AH   | Panasonic LC-X1238APG    |
| 2320351                           | UPS-BAT/LI-ION/24DC/60WH | A123 Systems ALM 12V7    |

**Activating Service Mode** 

The UPS needs to be placed into "Service Mode". This is accomplished by pressing both buttons simultaneously for at least 6 seconds on the front panel of the UPS as shown in Figure 1. Once "Service Mode" is activated the LEDs on the battery status bar will turn off and the red "Alarm" LED will turn on.



Figure 1.



#### **Removing Battery Fuse and Battery Cells**

The fuse(s) in the battery module should be removed before the battery is replaced to prevent a possible short circuit from occurring. Use the following figures to remove the fuse(s) and depleted battery cells.



Figure 2C.

## **Replacing Battery Fuse and Battery Cells**

Replacing the fuses and the battery cells is the reverse process of removal. When installing the new battery cells be careful to ensure that the wires are not pinched or caught under the cells or in a location that would prevent the enclosure door from properly closing and latching.

## **Resetting Battery Identification and Status**

Once the batteries are replaced and the fuse(s) installed, the UPS needs to be reset to recognize the new battery installation. This process resets the State of Health, State of Charge, and State of Function displays in the software.

As shown in Figure 3, push and hold the button labeled "UPS -> Stick" for at least six seconds. The reset function will be indicated by the battery LED bar graph flashing a few times.



Figure 3.



#### **Exiting Service Mode**

To return to normal operation, both pushbuttons on the UPS need to be pressed and held for six seconds as shown in Figure 4. This step will be confirmed when the red Alarm LED turns off and the green battery LED bar graph begins to cycle the LEDs up.

**NOTE**: The green LEDs in the battery bar graph will continue to cycle until the new battery is completely charged. SOF, SOC, and SOH functions in the software will also report "unknown" until the battery is completely charged and recognized by the UPS.



Figure 4.