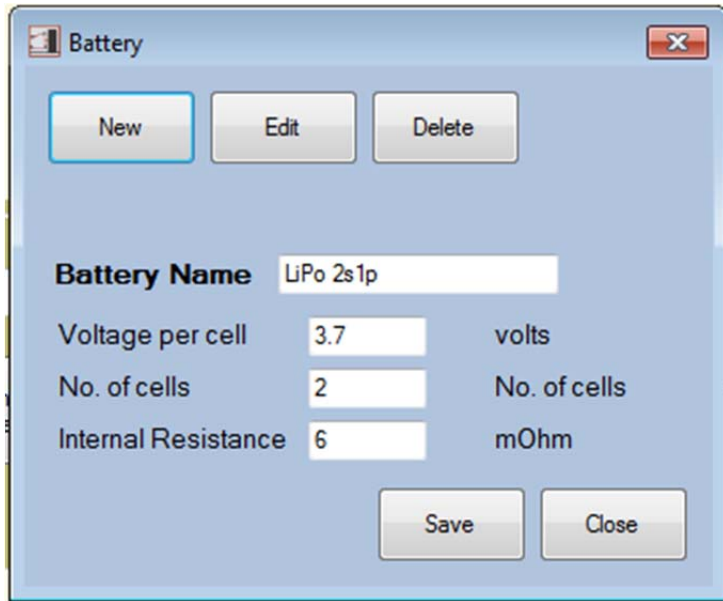# Battery Manager User's Manual

General

The Battery Manager allows you to Edit, Add, Save, and delete battery models.

To simulate the battery 3 values are required.

Voltage per cell – For NiMh use 1.2 Volts per cell. LiPo use 3.7 Volts per cell.

No. of cells – Just like is says enter the number of cells connected in series in the pack.

Internal Resistance – For NiMh cells the IR value is normally printed on the label. LiPo cells do not provide this value. Some chargers have a feature which allows you to measure it. To measure it yourself I use the following method to get a approximate value.

1. Measure the resting voltage of the battery (battery voltage with no load connected).
2. Apply a known current load and measure the battery output voltage under load.
3. Calculate the internal cell resistance using this formula.
   Internal Resistance = (Noload Voltage – Loaded Voltage)
                          Current x No. of Cells
4. Repeat the test several times.