High Power Lithium Ion APR18650M1

A123Systems lithium-ion rechargeable APR18650M1 cell is capable of very high power, long cycle and storage life, and is inherently safe due to its use of patented nanophosphate technology.

3.6V to 2V

4.2V to 0.5V

Nominal capacity and voltage 1.1 Ah, 3.3 V

Recommended standard charge method 1.5A to 3.6V CCCV, 45 min

Recommended fast charge current 5A to 3.6V CCCV, 15 min

Maximum continuous discharge 30A

Cycle life at 5C discharge, 100% DOD Over 1,000 cycles

Recommended charge and cut-off V at 25 ℃

Recommended charge and cut-off V below

Operating temperature range

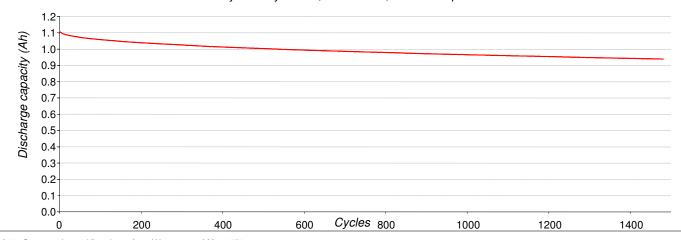
-30 °C to +60 °C Storage temperature range -50 °C to +60 °C

Core cell weight ~40 grams



Discharge Characteristics 25°C 3.6 3.4 3.2 Voltage (V) 3.0 2.8 2.6 5A 2.4 10A 2.2 20A 2.0 0.0 0.2 0.4 0.6 0.8 1.0 1.2 Capacity (Ah)

Projected Cycle Life, 100% DOD, Room Temperature



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