

Lithium Ion Cells

Lithium ion cells is a cost effective battery technology. It is a green alternative to fossil fuels. The technology is available for 1.5Ah, 50 Ah and 100 Ah cells.

Salient Features

Capacity	50 Ah	100 Ah	1.5 Ah
Nominal Voltage	3.6 V		
Positive Electrode	Lithium Nickel Cobalt Aluminium Oxide		
Negative Electrode	Graphite		
Cell Case and Lid	Aluminium alloy		MS/SS
Terminal Seal	Ceramic to Metal		Plastic Compression
Separator	Polymeric Separator		
Electrolyte	Lithium salt dissolved in organic solvents		
Cell Dimensions in mm	130 x 123 x 50 (W x H x T) approx	130 x 208 x 50 (W x H x T) approx	18650 type
Cell Mass	~ 1.5 kg	~2.7 kg	40 g
Energy Density	≥140 Wh/kg		
Operating Temperature	10°C to 30°C		
Cycle life	>1500 cycles at 80% DOD		
Calendar life	>15 years		
Vibration	25 'g' in sine mode, 17.25 'grms' in random mode and Transportation 8 'g'		10 'g' in Sine mode, 13.5 grms in Random
Leak rate	Less than 10-8 mbar L/s		Less than 10-5 mbar L/s
Safety features	Rupture disc and Shutdown separator		Shutdown separator, PTC, CID

Applications

Lithium ion cells find large societal applications in Electric Vehicle transport and communication areas.