



LITHIUM BATTERY POWER

## 36v 60Ah



### 36 Volt Lithium Ion Battery

LBP 36v 60Ah is a high-performing deep cycle, 36 volt battery, built on patented Lithium Iron Manganese Phosphate chemistry. The LBP36v60Ah features a built in automatic battery management system (BMS) that keeps the battery running at peak performance for maximizing cell cycle life. Designed as a "drop in replacement" LBP36V60Ah is plug and play battery for any application that currently uses a lead acid, gel or agm battery.

### Overview

The LBP36v60Ah is ideal for mission-critical, material handling or stationary - standby energy storage applications. The module's inherent safety, long cycle life, and zero maintenance offers end-users the assurance of 24/7 system uptime, while delivering significant cost-of-ownership over alternatives to lead acid by replacing with this reliable lithium ion solution performing with at least twice the run-time and <70% of the weight of similarly sized SLA batteries.



The internal Battery Management System (BMS) operates seamlessly with any application. The battery system manages all battery module parameters in real-time.

### Features

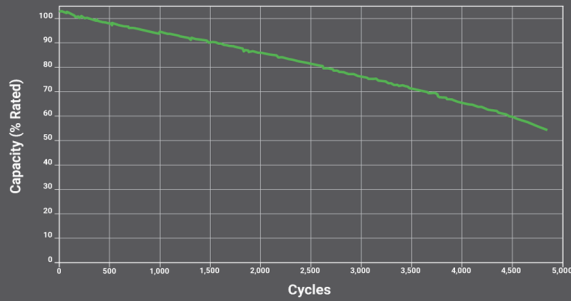
- >4000 cycles at 80% DOD
- Create systems 36 - 1000 V
- Series and/or parallel operation
- Automatic system cell balancing
- Temperature monitoring
  
- Exceptional voltage stability
- Rugged mechanical design
- Footprint of Group 31 lead acid case
- Maintenance-free
- No hydrogen generation or gassing
- **Stock available for quick delivery in US or worldwide.**

Specifications	
Nominal Voltage	40.7 V
Nominal Capacity @ 1C	60 Ah
Charge Voltage	46.2V - 46.6V
Charge Current	Recommended ≤ 30 A
	Max Continuous <sup>1</sup> 60 A
Discharge Voltage Minimum	27.5 V
Discharge Current Max Continuous <sup>1</sup>	60 A
Pulse Current 5 Sec	75 A
Weight	33.5 lb / 15.15 kg
Dimensions L x W x H (including terminals)	12.7"/323mm x 6.7"/171mm x 8.5"/215mm
BCI Group Number	Group 31
Terminals, Female-threaded	3/8" x 1.25
DC internal resistance (max)	15 mΩ

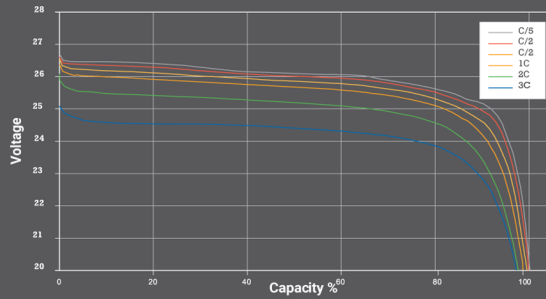
# Common Specifications

Operating Temperature	Charging: -10°C to 45°C Discharging: -20°C to 70°C
Storage Temperature	-40°C to 50°C
Operating Humidity	5% to 95%, non-condensing
Water/dust Resistance	IP56
Ingress Protection (IP) of Solids 5	Protected against harmful deposits of dust 
Ingress Protection (IP) of Water 6	Protected against strong jets of water 
Certifications	UL 1642 (cells) FCC Class B, CE
Shipping Classification	UN 3480, Class 9 UN 38.3

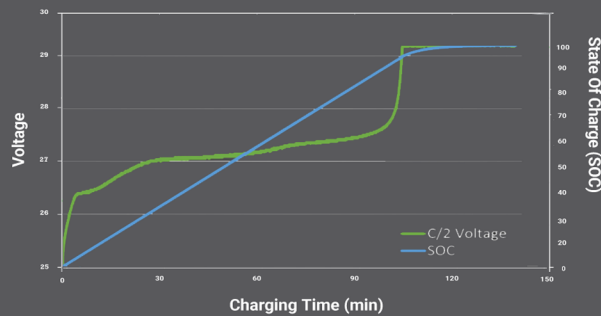
Discharge Cycle Life Performance at 25°C  
C/2 cycling (100%DOD)



Voltage Profiles at Various Rates 25°C Ambient Temperature



Typical C/2 Charging Voltage 25°C Ambient Temperature



# Battery Management System

All LBP modules include a Battery Management System (BMS). The BMS maintains all the batteries charge/dis-charge controls.

Parameters		Value
Voltage	Charging voltage cutoff	30.4±1%
Current	Maximal continuous charging current	≤60A
	Maximal continuous discharging current	≤100A
	Power consumption	<5mW
Overcharge Protection	Over charge detection voltage	4.3V±0.025V
	Over charge detection delay time	0.96S~1.24S
	Over charge release voltage	4.1V±0.05V
Discharge Protection	Discharge cutoff voltage – Instant Recovery	2.75V±0.08V
	Over discharge detection voltage	2.25V±0.08V
Over Discharge Protection	Over discharge detection delay time	<180mS
	Over discharge release voltage	2.5V±0.1V
	Short Circuit Protection	Detection condition
Detection delay time		230~500uS
Release condition		Cut load, automatically recover
Temperature protection	Over temperature protection	75°C

[www.LithiumBatteryPower.com](http://www.LithiumBatteryPower.com)

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Performance may vary depending on, but not limited to battery usage and application. If battery is used outside specifications, performance will diminish. All specifications are subject to change without notice. All information provided herein is believed, but not guaranteed, to be current and accurate.

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