



LITHIUM BATTERY POWER

## 24v 75Ah



### 24 Volt Lithium Ion Battery

LBP 24v 75Ah is a high-performing deep cycle, 24 volt battery, built on patented Lithium Iron Manganese Phosphate chemistry. The LBP24v75Ah 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" LBP24V75Ah is plug and play battery for any application that currently uses a lead acid, gel or agm battery.

### Overview

The LBP24v75Ah 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

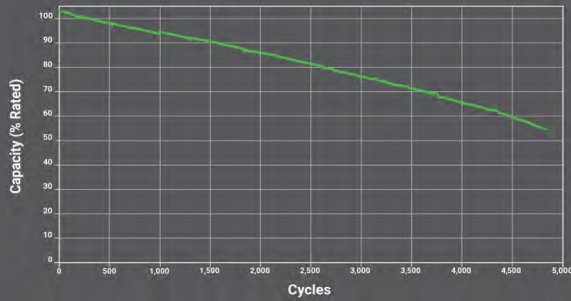
- >4000 cycles at 80% DOD
- Create systems 24 - 1000 V
- Series and/or parallel operation
- Automatic system cell balancing
- Temperature monitoring
  
- Exceptional voltage stability
- Rugged mechanical design
- Footprint of Group 31 lead acid case
- Maintenance-free
- No hydrogen generation or gassing
- **Stock available for quick delivery in US or worldwide.**

Specifications	
Nominal Voltage	25.9 V
Nominal Capacity @ 1C	75Ah
Charge Voltage	29.2V - 29.6V
Charge Current	Recommended ≤ 35 A
	Max Continuous <sup>1</sup> 75 A
Discharge Voltage Minimum	19.25 V
Discharge Current Max Continuous <sup>1</sup>	150 A
Pulse Current 5 Sec	320 A
Weight	27.0 lb / 12.2 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)	<10 mΩ

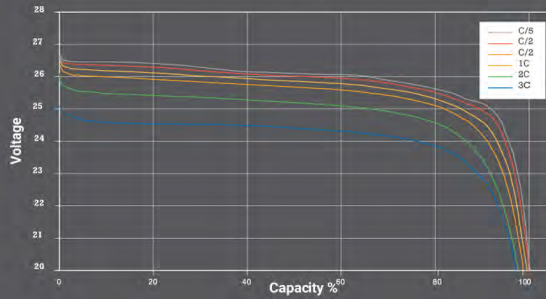
# Common Specifications

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 
Cer	UL 1642 (cells) FCC Class B, CE
	UN 3480, Class 9 UN 38.3

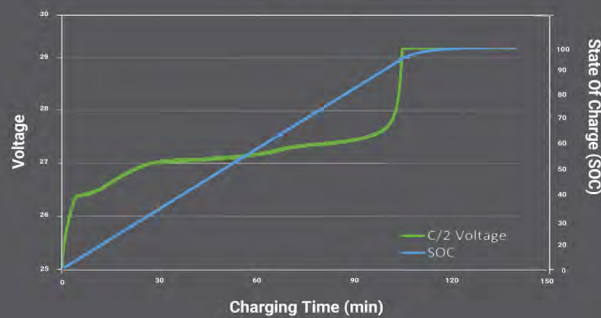
Discharge Cycle Life Performance at 25°C  
C/2 cycling (100%DOD)



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%
	Maximal continuous charging current	≤75A
Current	Maximal continuous discharging current	≤75A
	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
	Detection condition	Exterior short circuit
Short Circuit Protection	Detection delay time	230~500uS
	Release condition	Cut load, automatically recover
	Over temperature protection	75°C

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

## Headquarters / Sales

Lithium Battery Power  
1916 Drew Street  
Clearwater, Florida 33765  
USA

Tel +1 (727) 223-9831  
Fax +1 (727) 333-7296

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.

Copyright © 2019 Lithium Battery Power, LLC.

LBP25v75AH  
Datasheet  
JUN 2019