LITHIUM BATTERY POWER

LBP 52v 10kw - 192Ah

48Volt 9,954W Lithium Ion Battery

LBP's 48v 192Ah is a high-performing deep cycle, 48 volt battery, built on patented Lithium Iron Manganese Phosphate chemistry. The LBP48V192AH features a built-in automatic battery management system (BMS) that keeps the battery running at peak performance for maximizing cell cycle life. Custom designed, The LBP48V192AH is powerhouse for any application that currently uses a high energy demand needing to last for hours or even days of service. (Application Determined)

Overview

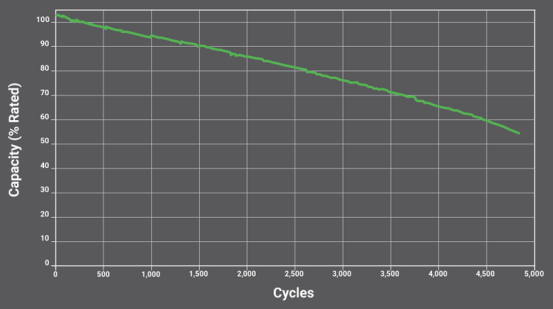
The LBP48V192AH is ideal for mission-critical, material handling or stationary - standby energy storage applications. The module's inherent safety, long cycle life, and zero maintenance offers end-users the assurance of 24/7 system uptime, while delivering significant cost-of-ownership over alternatives 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

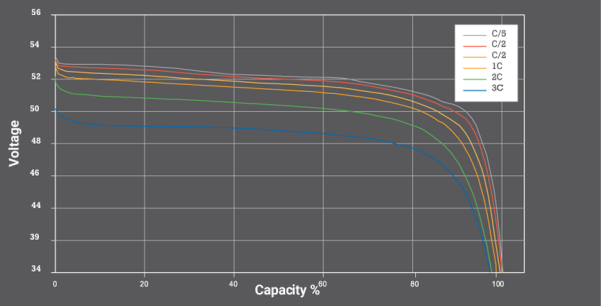
- >3000 cycles at 80% DOD
- Create systems 10kW - 1000's of kW's
- Series and/or parallel operation
- Automatic system cell balancing
- Temperature monitoring
- Exceptional voltage stability
- Rugged mechanical design
- Maintenance-free
- No hydrogen generation or gassing
- **CAN interface for external BMS monitoring by LCD, PC Software, LIN, CAN Clusters**

Specifications		
Nominal Voltage		51.8 V
Nominal Capacity @ 1C		192AH
Charge Voltage		57.7V - 58.8V
Charge Current	Recommended	≤ 95 A
	Max Continuous[1]	100 A
Discharge Voltage Minimum		41.3 V
Discharge Current Max Continuous[1]		200 A
Pulse Current 5 Sec		550A
Weight		136.0 lb. / 61.7 kg
Dimensions L x W x H (including terminals)		36.75" x 19.75" x 4"
BCI Group Number		CUSTOM
Terminals, Female-threaded		Brass M10x1.25 OR 3/8-16
DC internal resistance (max)		>18.8 mΩ

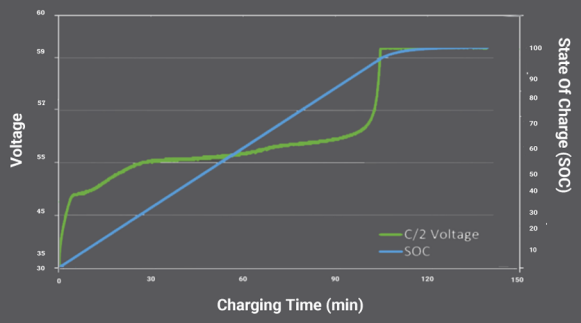
Discharge Cycle Life Performance at 25°C
C/2 cycling (100%DOD)



Voltage Profiles at Various Rates 25°C Ambient Temperature



Typical C/2 Charging Voltage 25°C Ambient Temperature



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	IP54
Ingress Protection (IP) of Solids 5	Protected against harmful deposits of dust 
Ingress Protection (IP) of Water 4	Protected from water spray from any direction 
Certifications	UL 1642 (cells) FCC Class B, CE
Shipping Classification	UN 3480, Class 9 UN 38.3

Battery Management System

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

Parameters		Value
Voltage	Charging voltage cutoff	60.5±1%
Current	Maximal continuous charging current	≤120A
	Maximal continuous discharging current	≤200A
	Power consumption	<2.25W
Overcharge Protection	Over charge detection voltage	4.2V±0.025V
	Over charge detection delay time	0.96S~1.24S
	Over charge release voltage	4.0V±0.05V
Discharge Protection	Discharge cutoff voltage – Instant Recovery	2.75V±0.08V
Over Discharge Protection	*Over* discharge detection voltage	2.25V±0.08V
	Over discharge detection delay time	<180mS
	Over discharge release voltage	2.5V±0.1V
Short Circuit Protection	Detection condition	Exterior short circuit
	Detection delay time	230~500uS
	Release condition	Cut load, automatically recover
Temperature protection	Over temperature protection	75°C

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