



# **Model BB10012**

100AH 12V LiFePO4 Deep Cycle Battery **Data sheet** 

Electrical Specification		
Voltage	12V	
Capacity	100AH	
Operating Temperature	- 4°F to 135°F	
	(-20°C to 57.2°C)	
Efficiency	99%	
Self Discharge	2-3% per month	
Maximum Series Voltage	48V	
Cycles	3K-5K	
Built-in BMS	Internal	
Resistance	7 mΩ	
Usable DoD	100%	

Discharging Specification		
Max Discharge Current	100A	
Peak Discharge Current	200A for 30 Seconds	
Surge for Loads over 500A	.5 Seconds	
Recommended LVD	10.5V	
BMS Discharge Voltage Cut-Off	10V	
Reconnect Voltage	10V	
Short Circuit Protection	Yes	

Recognized Specification		
Certifications	UN38.3, UL/CSA-62133-2, UL-2054	
Shipping Class	UN3480, Class 9	

Drawing Specification	
9.42	
6.86	12.28
6.73	12.08

Charging Specification		
Recommended Charge Current	.5c	
Max Charge Current	50A	
Absorption Voltage	14.2V-14.6V	
Float Voltage	13.4V-13.8V	
Equalization Voltage (if applicable)	14.4V	
	30 Minutes	
Absorption Time	per 100AH	
	battery bank	
BMS Charge Current Cut-Off	.5C Recommended	
Recharge/Rebulk Voltage	13.3V	
BMS Cell Balancing Voltage Range	14.2V-14.6V	
High BMS Voltage Protection	14.7VDC	
Temperature Compensation	No/Disable	

Mechanical Specification		
Dimensions	12.76"L X 6.86"W	
	X 8.95"H	
Weight	31 lbs.	
Terminal Type	.25" Brass	
Terminal Hole	3/8" hole and 3/8"	
	or 5/16" hardware	
	is suggested	
Terminal Torque	9-11 Ft-lb.	
Case Material	ABS Fire Rated	
Cell Type - Electrolyte	LiFeP04	
Sealed and Water	Non-Submersible	
Resistant Case	eldisaemauc-non	

Temperature Specification		
Discharge Temperature	-4°F to 135°F	
	(-20°C to 57.2°C)	
Charge Temperature	25°F - 135°F	
Storage Temperature	-10°F to 140°F	
	(-23°C to 60°C)	
BMS High Temperature Cut-Off	>135°F	
BMS Reconnect Temperature	<135°F	



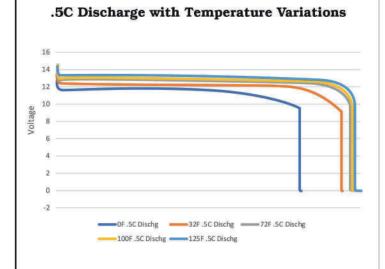


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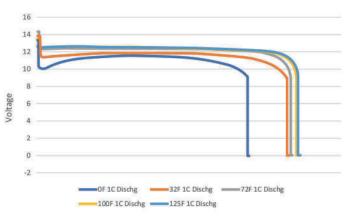
100AH 12V LiFePO<sub>4</sub> Deep Cycle Battery

Data sheet

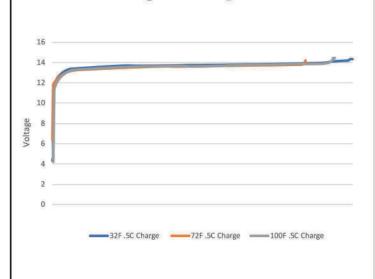
# **Performed Operation Data**



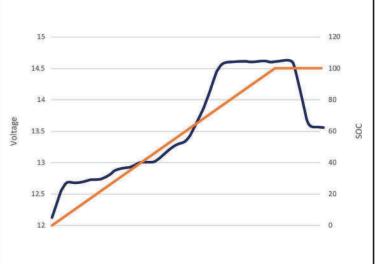
### 1C Discharge Voltage with Temperature Variations



#### .5C State of Charge with Temperature Variations



#### Standard Charge Curve with 3 Stage Charger



\*Note: The storage temperature range is  $-10^{\circ}$ F to  $140^{\circ}$ F ( $-23^{\circ}$ C to  $60^{\circ}$ C). We recommend bringing the Battle Born Batteries to a 100% charge and then disconnecting them completely for storage. After six months in storage, your batteries will remain 75-80% charged.

Storing batteries in subzero weather (- $15^{\circ}F$  or more) has the potential to crack the ABS plastic and more importantly could cause a faster loss of capacity, in some cases drastically more than the typical 2-4% per month loss.