EV Power
EVH12V230AH
LiFePO4 Battery Datasheet.

Introduction

This datasheet describes the EVH12V230AH 12.8V 230Ah LiFePO4 battery pack as supplied by EV Power Aust. Pty Ltd.

Features

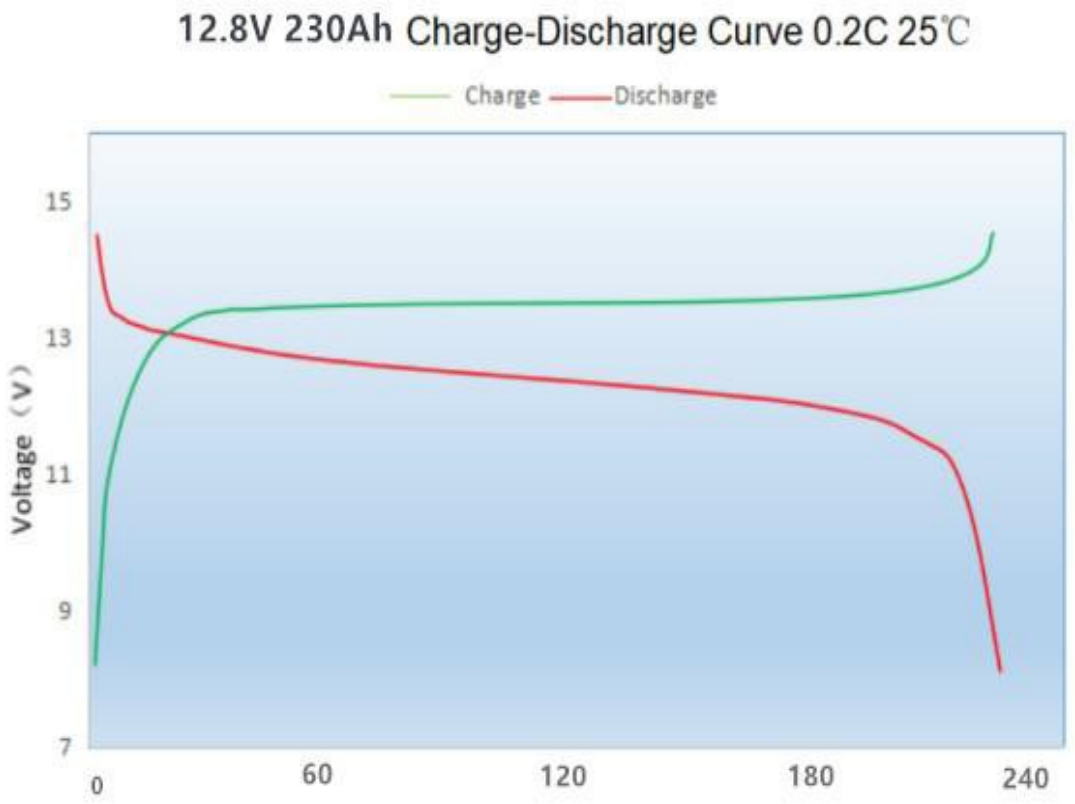
- **Drop in replacement for a Lead Acid battery.**
- Full internal protective Battery Management System (BMS)
- Bluetooth communication to Mobile Phone App. (EV Power-1.0)
- Simple to install and easy to understand
- < 50% of the weight of equivalent capacity Lead Acid battery.work
- > 50% extra usable energy compared to a similar capacity Lead Acid battery.

Specifications

Item	Value	Comments
Nominal voltage	12.8V	

Nominal capacity	≥230Ah	At 0.2C discharge rate
Max. discharge current	200A	10 minutes
Pulse discharge current	450A	1 second
Instant discharge current	600±20A	3-200 mS
Discharge cut-off voltage	10.5V±0.1V	Internal discharge FETs will disconnect.
Nominal Charge voltage	14.2-14.6V	Charge mode: CC/CV Use a constant current, constant voltage(CC/CV) please use lithium charger profile. DO NOT REVERSE!
Charge current	≤200A	
Internal resistance	≤ 10mΩ	Between positive and negative poles
Operating temperature range	Charge	0℃ ~ +45℃
	Discharge	-20℃ ~ +60℃
		When ambient temperature is higher than 45℃ use active cooling.
Storage temperature range	0℃ ~ 40℃ (SOC 80%)	Recommended long-term storage temperature is 15~25℃
Humidity	5%≤RH≤85%	
Enclosure material	ABS plastic	
Weight	27.5±0.2Kg	
Size L*W*H	(522±2)*(240±2)*(218±2)mm	
BMS Protection functions	Over-charge protection, Over discharge protection, Over current protection, Cell Balancing, Temperature protection.	
Communication (optional)	Bluetooth BLE Mobile Phone App	
Mounting Bolts	M8 Stainless Steel	
Internal Cell Structure	IFR32700- 3.2V- 6Ah- 4S39P	

Charge and Discharge Curves



Precautions

- Charging current should be less than maximum charge current specified. Charging currents higher than recommended may damage the battery.
- Discharging current should be less than the maximum discharge current specified. Currents higher than recommended may damage the battery.
- It is possible that self-discharge may drain the battery if it is not used for an extended period. In order to prevent over-discharge the battery must be charged periodically to maintain between 13.2V and 13.6V (at least every 3 months). Over-discharging may causes loss of capacity, power, and other battery functions.
- Charge the battery within 12 hours of use.
- Protect the battery from high environmental humidity, pressure, strong magnetic fields, static discharge and EMI.
- Do not reverse the polarity of the battery pack for any reason.
- Do not reverse polarity during charging.
- Do not immerse the battery pack in water or sea water, or spray.
- Do not disassemble the battery.

- Do not expose the battery to extreme heat or naked flame.
- Do not short circuit the battery terminals.
- Where possible use a dedicated LiFePO4 charger for charging.
- Do not combine the batteries in series or in parallel without prior confirmation from EV Power.

Disclaimer

EV Power Australia Pty Ltd will not be held responsible for any injury or damages arising from use of the battery. Before using the battery, you should read the instructions and carefully examine its appropriateness and proposed use in the application. Knowledge of basic DC electrics is a prerequisite. Incorrect connection, charging, discharging, or other environmental factors may cause damage to the battery, the application or both.

EV Power reserves the right to change the content of this specification without prior notice.