



LITHIUM BATTERY

LFP4850 (48V50AH)

Overview

Apollo Lithium iron phosphate battery module which designed for storage and power supply system application. This battery module integrated with intelligent BMS with big advantages on safety, cycle life, energy density, temperature range and environmental protection.

This product specification describes the type, size, structure, electrochemistry performance, service life, and BMS characteristics.

The specification will be updated based on different customer requirement.

Battery Images



Advantages

- The battery module consists of LFP cells, wire, BMS and ABS container.
- Packed with high performance LFP single cell, long life, safety and wide temperature range
- High energy density, small size, light weight, no pollution;
- Packing with single cell container, fire retardant wire and copper connecting bar, stable and safe.
- Built-in BMS, with battery voltage, current, temperature and health management.
- LCD(optional) indicate the battery SOC and operating status.
- Support Max 4pcs in series.
- Flexible customization of dimensions

More than 15 years design life, Stable performance, maintenance-free



Safety



Multipurpose



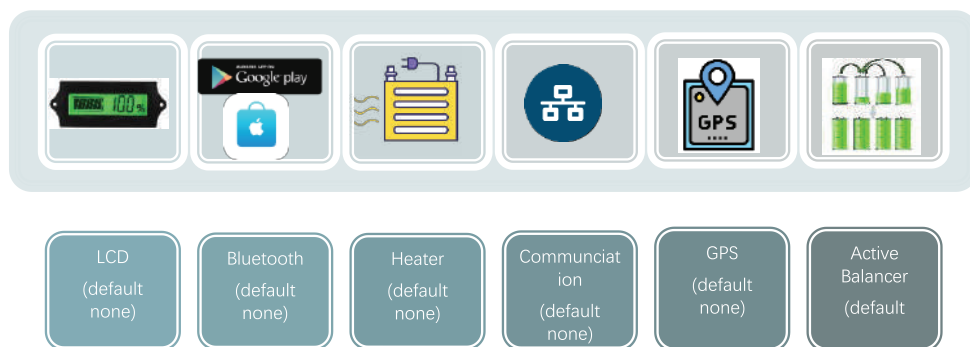
Simple Maintenance



Fast Charge/Discharge



Customization Functions



Note 1: Please always refer to the latest edition of our technical datasheet that published on our website to ensure safe and efficient operation.



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Battery specification

ELECTRICAL SPECIFICATIONS

Cell Type - Chemistry	LiFePo4
Nominal Voltage	48V
Amp Hour Capacity	50AH
Dimensions	520*240*220mm
Weight	22±0.5kgs
Terminal Type	M8
Case Material	ABS-Sealed
Case IP Rating	IP65
Series connections	Max to 51.2V
Parallel connections	No limited
Storage Temperature	(-10 to 40°C)
Resistance - Milliohms	< 15
Self Discharge per Month	< 2%

CHARGE SPECIFICATIONS

Floating Charge Voltage	≤51.75V
Boost Charge Voltage	≤54V
Recommend Charge Current	≤10A
Max Charge current	≤50A
Charge current (0 to -10°C)	<0.1C
Charge current (-20 to -10°C)	<0.05C
Charge Temperature	(0 to 45°C)

DISCHARGE SPECIFICATIONS

Recommend Discharge current	≤50A
Peak Discharge current	≤55A
Max Discharge Voltage	≥34.5V
Discharge Temperature	(-20 to 60°C)

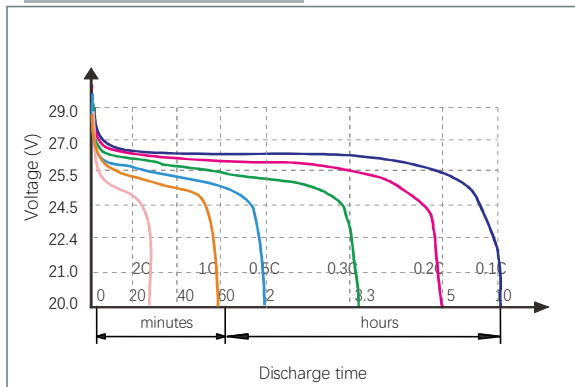
BMS SPECIFICATIONS

Version	Softversion	
Code	J-B015S60	
Primary Charge Current Protection	70±5A	10S±3S
Second Charge Current Protection	NA	
Third Charge Current Protection	NA	
High Voltage Protection	56.25±0.4V	2S±1S
Reconnect Voltage	53.25V±0.4V	
Primary Discharging Current Protection	70±5A	10S±3S
Second Discharging Current Protection	275±55A	0.3S±0.2S
Third Discharging Current Protection	NA	
Low Voltage Protection	34.5±0.8V	
Reconnect Voltage	36±0.4V	
High Temp Protection	65±3°C	
Reconnect Temp	50°C	
Balancing voltage	49.5±0.5V	
Balancing current	40±20mA	
Shortage current	600±120A	

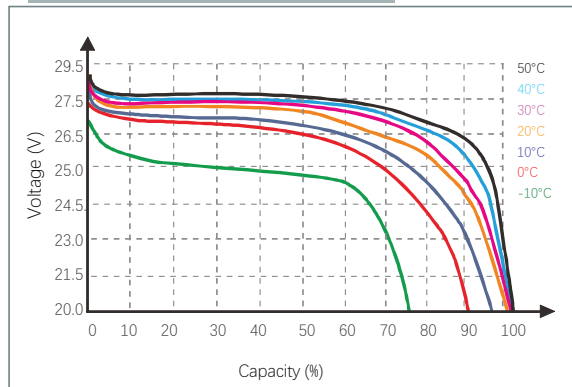
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Performance curve

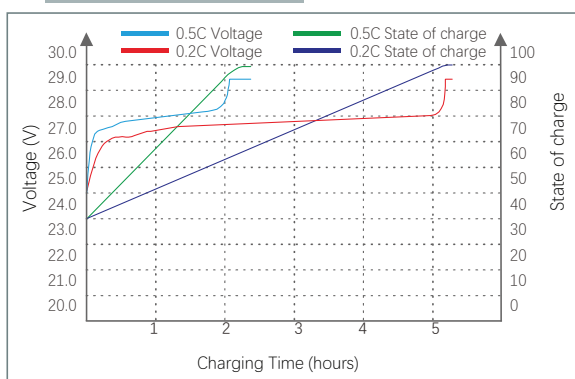
● Discharge characteristics (25°C)



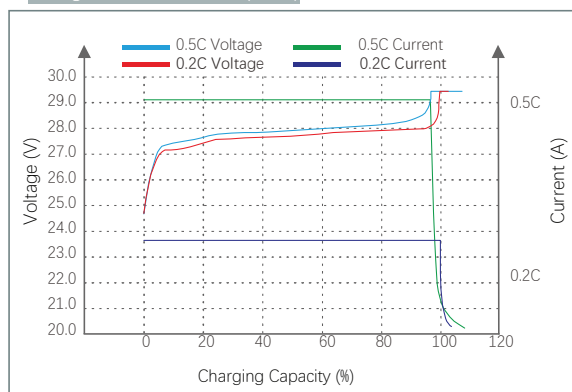
● Temperature effect on discharging (0.5C)



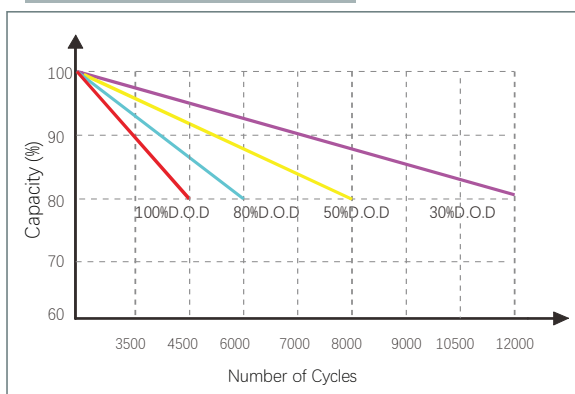
● State of Charge Curve (25°C)



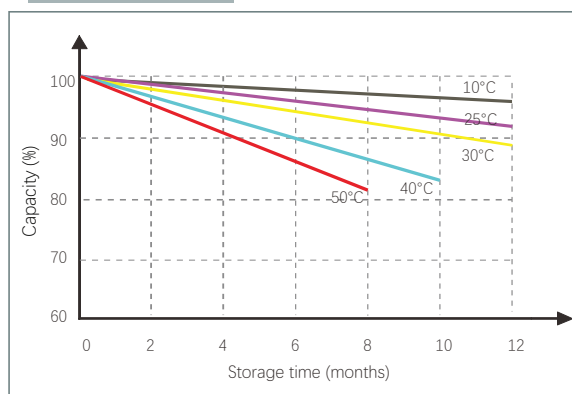
● Charge characteristics (25°C)



● Cycle Life On D.O.D 0.2C Rate (25°C)



● Self-Discharging Curve



Note 2: The above curves are based on laboratory testing data @ 25°C 40%RH

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