

LITHIUM BATTERY

LFP48100 (48V100AH)

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



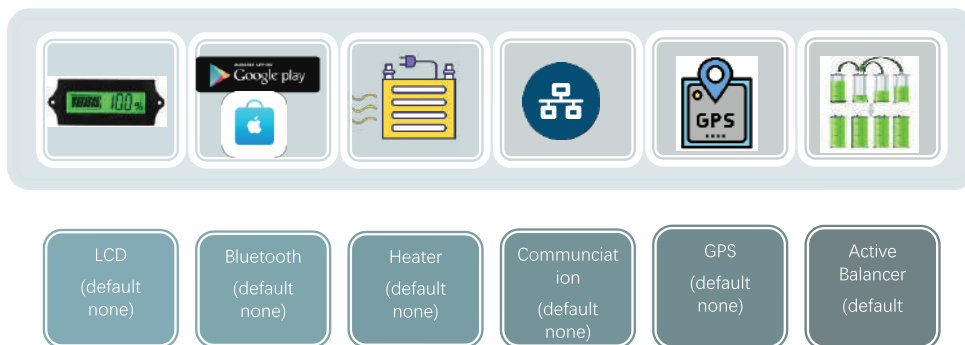
Simple Maintenance



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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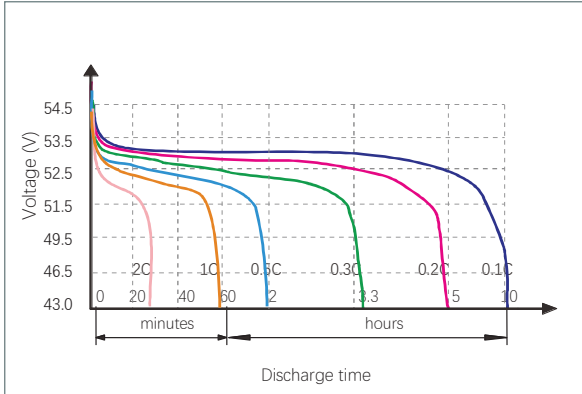
Battery specification

ELECTRICAL SPECIFICATIONS		BMS SPECIFICATIONS	
Cell Type - Chemistry	LiFePo4	Version	Softversion
Nominal Voltage	48V	Code	LBMS15S100A
Amp Hour Capacity	100AH	Primary Charge Current Alarm	102±2A 20S±0.2S
Dimensions	442*480*133mm	Second Charge Current Protection	114±2A 3S±1S
Weight	40.0±0.2kgs	Third Charge Current Protection	Turn to 10A automatic
Terminal Type	OT-M8	High Voltage Alarm	56±0.2V 1S±0.2S
Case Material	SPCC	High Voltage Protection	57±0.2V 1S±0.2S
Case IP Rating	IP35	Reconnect Voltage	54.0±0.2V
Series connections	Not Allowed	Primary Discharging Current Alarm	102±1A
Parallel connections	Max 16pcs	Second Discharging Current Protection	121±1A 30S±0.2S
Storage Temperature	(-10 to 40°C)	Third Discharging Current Protection	122±1A 3S±0.2S
Resistance - Milliohms	<30	Low Voltage Alarm	43.2±0.2V
Self-Discharge per Month	< 2%	Low Voltage Protection	42.0±0.2V
CHARGE SPECIFICATIONS		Reconnect Voltage	46.5±0.2V
Floating Charge Voltage	≤51.75V	High Temp Protection	70±3°C
Boost Charge Voltage	≤54.0V	Reconnect Temp	60°C
Recommend Charge Current	≤20A	Balancing voltage	51±0.2V@30mV
Max Charge current	≤100A	Balancing current	150±10mA
Charge current (0 to -10°C)	<0.1C	Shortage current	174±5A
Charge current (-20 to -10°C)	<0.05C	Communication port	RS485/DO/
Charge Temperature	(0 to 45°C)	Default protocols	RS485
DISCHARGE SPECIFICATIONS		Additional Functions	
Recommend Discharge current	≤100A	LCD screen(Optional)	Touchable/Button
Max Cont Discharge current	≤120A	Heater(Optional)	By Charger
Max Discharge Voltage	≥43.2V	GPS/ Anti-theft(Optional)	By BMS system
Discharge Temperature	(-20 to 60°C)	SNMP(Optional)	Build-in protocols

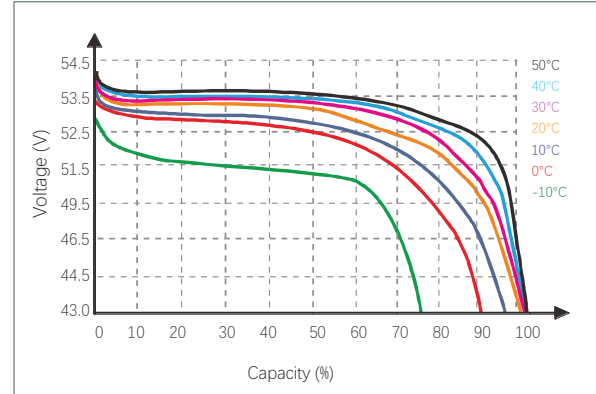
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Performance curve

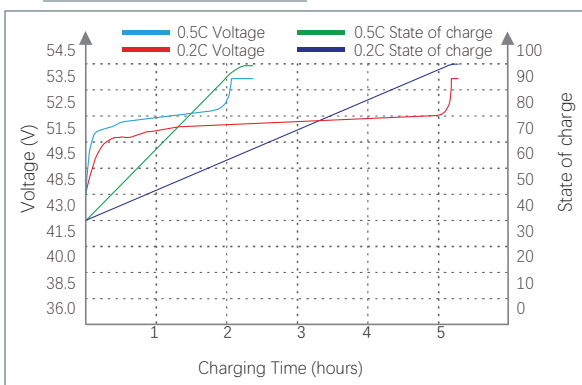
● Discharge characteristics (25°C)



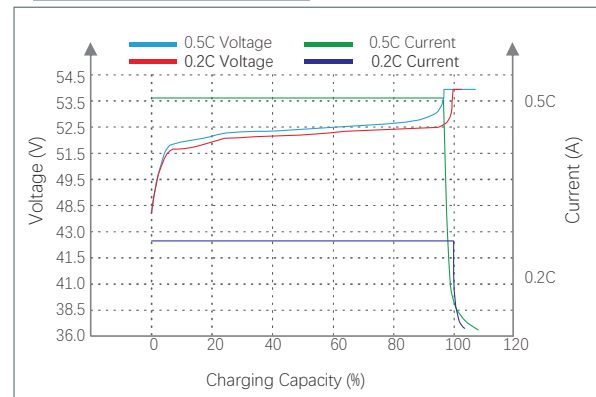
● Temperature effect on discharging (0.5C)



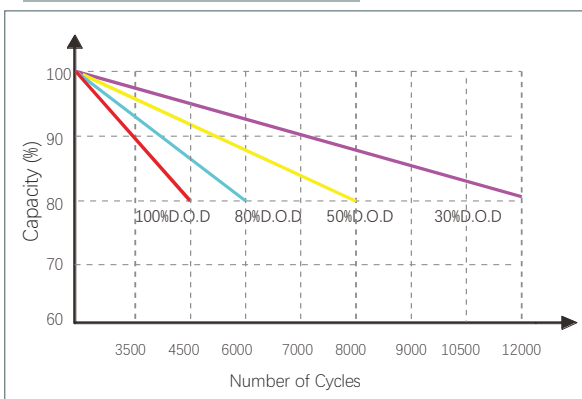
● State of Charge Curve (25°C)



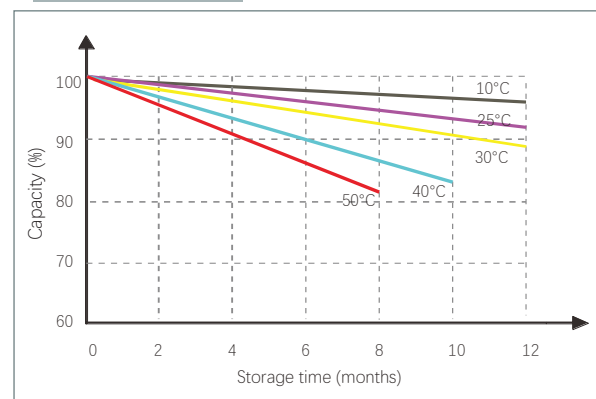
● Charge characteristics (25°C)



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



● Self-Discharging Curve



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