

48V Package



Battery Module	LFP100-48	LFP150-48	LFP200-48	
Combination method		15S		
Rated Capacity	Typical	100Ah	150Ah	200Ah
	Minimum	100Ah	150Ah	200Ah
Factory Voltage		49.5-50.5V		
Voltage at end of Discharge		40-42.5V		
Charging Voltage		53.2-54V		
Internal Impedance		≤50mΩ		
Standard charge		Constant Current 20A Constant Voltage 0.01CA cut-off		
Standard discharge		Constant current: 20A end voltage		
Maximum Continuous Charge Current		100A		
Maximum Continuous Discharge Current		100A		
Operation Temperature Range		Charge: 0~45°C Discharge: -20~55°C		
Storage Temperature Range		Less than 12 months : -10~35°C Less than 3 months: -10~45°C Less than 7 day : -20~65°C		
Volumetric specific energy	100 WH/L	95WH/L	127WH/L	
Gravimetric specific energy	99WH/KG	90WH/KG	109WH/KG	
Cycle life		≥8000cycle		
Dimensions	480*450*222 mm	480*650*242mm	480*650*242 mm	
Weight	48kg	70kg	88kg	

BMS Specification

1. The BMS is designed for 15/16 series lithium battery.
2. The BMS have all functions which are :
 - Overcharge detection function
 - Over discharge detection function
 - Over current detection function
 - Short detection function
 - Temperature detection function
 - Balance function
 - Communicate function
 - Alarm function

BMS Parameter

48V 15S / 16S Typical value specifications

Items	Details	Standard
Cell overcharge protection	Overcharge detection voltage	3.70±0.025V
	Overcharge detection delay time	Typical:1.0s
	Overcharge release voltage	3.45±0.02V
Cell over-discharge protection	Over-discharge detection voltage	2.75±0.02V
	Over-discharge detection delay time	Typical:1.0s
	Over-discharge release voltage	3.05±0.02V or charge release

48V 15S / 16S Typical value specifications

Items	Details	Standard
Over-current protection	discharge Over-current protection current1	120±10A
	discharge Over-current detection delay time 1	1S
	discharge Over-current protection current2	150±10A
	discharge Over-current detection delay time2	3.45≤100ms±0.02V
	Charge OC protection current	120±10A
Short protection	Short protection current	350±10A
	Protection condition	Load short
	Detection delay time	≤800us
	Protection release condition	Charging release
Temperature(T) protection	Charge high (T) protection	65±2℃
	Charge high (T) recover	60±5℃
	Discharge high (T) protection	65±2℃
	Discharge high (T) recover	60±5℃
	Charge low (T) protection	-5±2℃
	Charge low (T) recover	0±2℃
	Discharge low (T) protection	-20±5℃
	Discharge low (T) recover	-15±5℃
Balance	Balance threshold voltage	3.45V
Communication	It has RS232 and RS485 standard communication interface, it can real-time monitoring the capacity of battery bank, the voltage, current, environment temperature, and charging/discharging current.	
Alarm	It has over-temperature, over charge, under-voltage, over-current, short circuit alarm function.	

Discharge Curve & Charge Curve

