



Product Model



LFP48V/51.2V 300AH 15kwh
MeritSun Powerwall

Specification

Model		LFP48V300Ah 15KWH	LFP51.2V300Ah 15KWH
Package			
Combination method		15S 3P	16S 3P
Rated Capacity	Typical	300Ah	300Ah
	Minimum	300Ah	300Ah
Factory Voltage		52.2-53.9V	52.2-53.9V
Voltage at end of Discharge		40.5V	43.2V
Charging Voltage		54V	57.6V
Internal Impedance		≤100mΩ	≤100mΩ
Standard charge		Constant Current 60A ;Constant Voltage: 59.2V ; 5A cut-off	
Standard discharge		Constant current : 60A	
Maximum Continuous Charge Current		150A	150A
Maximum Continuous Discharge Current		150A	150A
Operation Temperature Range		Charge: 0~55℃	
		Discharge: -15~55℃	
		Less than 12 months : -10~35℃	
		Less than 3 months: -10~45℃	
Storage Temperature Range		Less than 7 day : -20~60℃	
		Dimensions	
		600*1100*230 mm	
Weight		165kg	
Volumetric specific energy		102WH/L	
Gravimetric specific energy		93WH/KG	
Cycle Life		≥8000	



Safe & Maintenance Free

No fuel, No noise, And No Worry



House Made Smart BMS

Patented Technology



Dual protection Security Design

Intelligent Protection



Plug & Play

Easy Installation And Simple Configuration



24/7

Uninterrupted Power Supply



Vertical or Wall-Mounted

Installation Structure
More Space Saving

Specification

Battery Management System

BMS Specification

1. The BMS is designed for 16 series of lithium-ion batteries.
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 Protect 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	2.7±0.02V
	Over-Discharge Detection Delay Time	Typical:1.0s
	Over-Discharge Release Voltage	3.05±0.02V or charge release

BMS Protect Parameter
48V 15S / 16S Typical Value Specifications

Over-Current Protection	Discharge Over-Current Protection Current1	155±2A
	Discharge Over-Current Detection Delay Time 1	1S
	Discharge Over-Current Protection Current2	180±5A
	Discharge Over-Current Detection Delay Time2	100ms
	Charge OC Protection Current	150±2A
Short Protection	Short Protection Current	350±10A
	Protection Condition	Load short
	Detection Delay Time	≤500us
	Protection Release Condition	Charging release
Temperature(T) Protection	Charge High (T) Protection	60±2℃
	Charge High (T)Recover	55±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.	