



Rack Mounted Battery

48V 100AH

FEATURES

BMS Protection

Overcharge/Over-discharge Protection, Charge/Discharge Over-current Protection, Short-Circuit Protection, Battery Voltage Self-Balancing, High-Temperature Discharge Cut-off.

Long Lifespan

Can be cycled up to 6000 times, with a lifespan of up to 20 years.

Multi-Brand Compatibility

Compatible with multiple inverter protocols from various brands, supports CAN/RS485 for seamless communication with popular solar inverters.

More Secure and Efficient

Each battery has two pairs terminals for positive and negative poles, allow more connections to improve the conductive efficiency and safety.

Smart Monitoring

Easily monitor your battery's status through the mobile app, which supports both Bluetooth and WiFi connections. Stay informed on your battery's health and performance in real-time.

Space-Saving Design

Easily integrates into standard 3U racks for efficient space use. Its manageable 95 lb weight allows for single-person installation.

Capacity Expansion

Up to 32 units can be connected in parallel, expandable to 163.84kWh.



**5120-
163840Wh**



**BMS
Protection**



6000 Cycles



**10-Year
Warranty**

@80% DOD 25°C



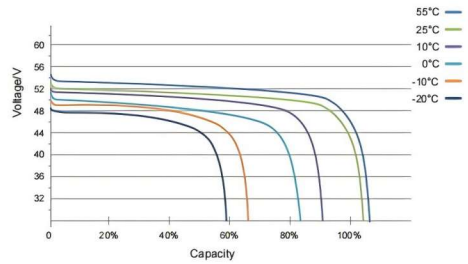
Mechanical Specification

Length	19.02in / 483mm
Width	22.09in / 561mm
Height	5.24in / 133mm
Weight	94.8lbs / 43kg
Terminals	M8 insert

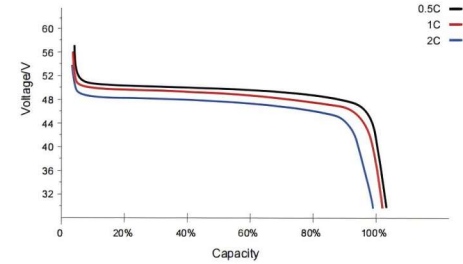
Materials

Case and Cover	METAL
Color	BLACK

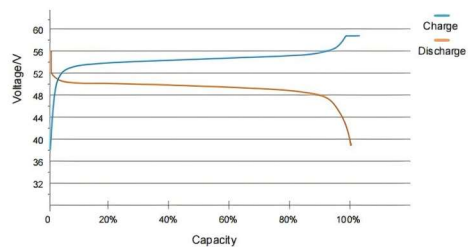
Discharge Characteristics At Various Temperatures



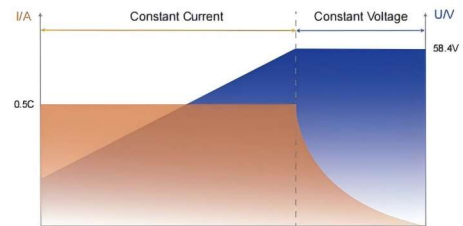
Discharge Characteristics At Various Rates



Charge & Discharge Voltage Characteristics



LiFePO4 Battery Charging Logic @0.5C



PLEASE NOTE

1.Lithium batteries ship under Class 9 Dangerous Goods PI 965 Section IA,Please contact your carrier company to determine their requirements for shipping. MSDS Sheets are available upon request.

2.Float charging is not applicable to lithium iron phosphate batteries, long-term float charging will accelerate battery aging or damage. If you have to set the float voltage for MPPT/PWM charge controller in solar system, we suggest to set it to (12V Battery)13.2V-13.6V, (24V Battery)26.4V-27.2V, (36V Battery)39.6V-40.8V, (48V Battery)52.8V-54.4V.

Lithium Iron Phosphate (LiFePO4)

Nominal Voltage	51.2V
Rated Capacity	100AH
Charge Method	CC/CV
Charge Voltage	58.4V
Bulk/Absorption Voltage	58.4V
BMS Balancing Voltage	Any cell voltage $\geq 3.45V$ Max Voltage difference between cells $>30mV$ In Charging
Equalize Voltage	Not applicable
Float Voltage*	Not applicable
Temperature Compensation	No/Disable
Charge Cut-off Voltage	58.4V
Discharge Cut-off Voltage	40.0V
Recommended Charge Current	50A
Recommended Discharge Current	50A
Maximum Continuous Charge Current	100A
Maximum Continuous Discharge Current	100A
Peak Current	120A/2s
WiFi	Yes
Bluetooth	Yes
Communication	CAN/RS485/RS232
Self Heating	No
Protection Rating	IP55
BMS Protection	- Over and Low voltage - Charge and Discharge Over current - Short circuit - High and Low temperature
Internal Resistance	$\leq 30m\Omega$
BMS Leakage Current	$\leq 10mA$
Charge Temperature Range	32°F (0°C) to 131°F (55°C)
Discharge Temperature Range	-4°F (-20°C) to 131°F (55°C)
Storage Temperature 1 week	-4(-20°C) to 149°F (65°C)
Storage Temperature 1 month	-4°F (-20°C) to 113°F (40°C)
Storage Temperature 1 year	-4°F (-20°C) to 77°F (25°C)
Humidity Operating:	5% to 90 % RH
Humidity Storage:	35% to 85% RH
Certifications: MSDS; UN38.3; CE; PSE	
Cycle Life	6000 cycles
Max connected in Parallel 32 units	Max connected in Series 2 unit