



# Movable Battery

## 48V 300AH

### Technology

Lithium Iron Phosphate (LiFePO4)	
Nominal Voltage	51.2V
Rated Capacity	280AH
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	40V
Recommended Charge Current	100A
Recommended Discharge Current	100A
Maximum Continuous Charge Current	200A
Maximum Continuous Discharge Current	200A
Peak Current	210A/1s
WiFi	Yes
Bluetooth	Yes
Communication	CAN/RS485/RS232
Self Heating	No
Protection Rating	IP20
BMS Protection	<ul style="list-style-type: none"> <li>Over and Low voltage</li> <li>Charge and Discharge Over current</li> <li>Short circuit</li> <li>High and Low temperature</li> </ul>
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°F (-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

## FEATURES:

- BMS Protection**

Overcharge/Over-discharge Protection, Charge/Discharge Over-current Protection, Short-Circuit Protection, Battery Voltage Self-Balancing, High and Low 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.

- Easy to Move**

There are sturdy handles on both sides of the top of the battery, which supports lifting by ropes, and the bottom is equipped with four heavy Footmaster Nylon Wheels, which are very smooth to move on flat ground.

- Capacity Expansion**

Up to 15 units can be connected in parallel, expandable to 230.4kWh.

Max Connected  
IN Parallel  
**15 Units**

Max Connected  
IN Series  
**1 Units**

# Unit Dimensions



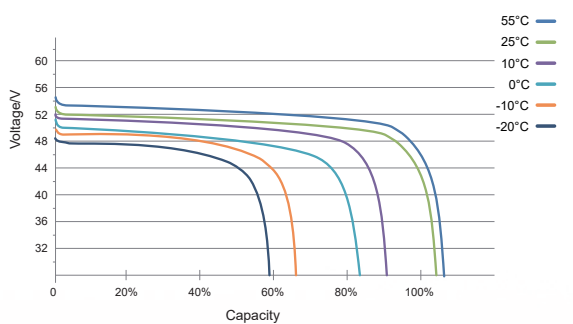
## Mechanical

Length	19.49in / 495mm
Width	10.26in / 260.5mm
Height	30.31in / 770mm
Weight	265.66lbs / 120.5kg
Terminals	M8 insert

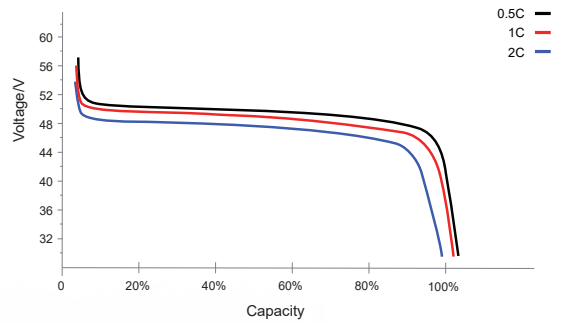
## Materials

Case and Cover	METAL
Color	WHITE

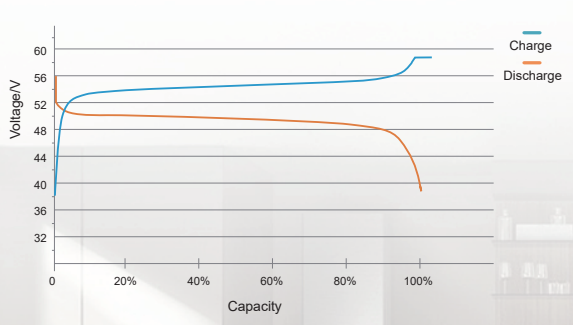
Discharge Characteristics At Various Temperatures



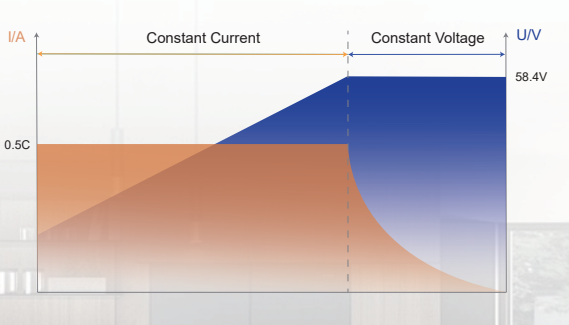
Discharge Characteristics At Various Rates



Charge & Discharge Voltage Characteristics



LiFePO4 Battery Charging Logic @0.5C



## PLEASE NOTE

- ★ 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.
- ★ 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.