



# Movable Battery

## 48V 314AH

### Technology

| Lithium Iron Phosphate (LiFePO4)      |                                                                                                                                                                                    |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nominal Voltage                       | 51.2V                                                                                                                                                                              |
| Rated Capacity                        | 314AH                                                                                                                                                                              |
| Charge Method                         | CC/CV                                                                                                                                                                              |
| Charge Voltage                        | 58.4V                                                                                                                                                                              |
| Bulk/Absorption Voltage               | 58.4V                                                                                                                                                                              |
| BMS Balancing Voltage                 | Any cell voltage $\geq 3.45V$<br>Max Voltage difference between cells $> 30mV$<br>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            | 140A                                                                                                                                                                               |
| Recommended Discharge Current         | 140A                                                                                                                                                                               |
| 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                     | IP30                                                                                                                                                                               |
| 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:

- Active Balance Technology**  
 Equipped with a 200A smart Battery Management System with active cell balancing, this 51.2V lithium battery keeps every cell working evenly. It improves charging efficiency, reduces long-term capacity loss, and extends overall service life for reliable daily performance
- Multi-Layer Safety System**  
 Features 200A BMS intelligent protection, a 250A breaker with shunt trip, and an aerosol fire suppression module for ultimate electrical safety.
- Multi-Monitoring Capability**  
 Seamless control via 7" HD touchscreen, Bluetooth/WiFi for real-time remote viewing, and PC software for comprehensive operational visibility.
- Massive Capacity, Compact Footprint**  
 Delivers 16.076 kWh of energy in a space-saving design. Scale up to 241 kWh by connecting up to 15 units in parallel—perfect for whole-home backup.
- Fire Protection**  
 Integrated aerosol fire-suppression modules help mitigate thermal-runaway risks and add an extra layer of safety, making it suitable for indoor and residential energy storage application
- 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 241.152kWh.

Max Connected  
IN Parallel  
**15 Units**

Max Connected  
IN Series  
**1 Units**

# Unit Dimensions



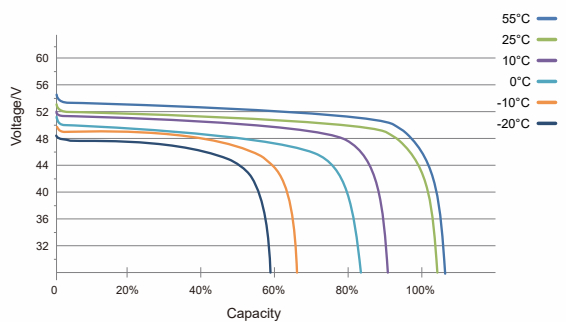
## Mechanical

|           |                   |
|-----------|-------------------|
| Length    | 19.69in / 500mm   |
| Width     | 10.24in / 260mm   |
| Height    | 33.13in / 842mm   |
| Weight    | 279.99lbs / 127kg |
| Terminals | M8 insert         |

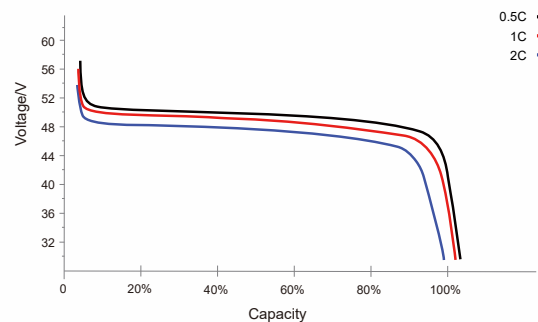
## Materials

|                |       |
|----------------|-------|
| Case and Cover | METAL |
| Color          | WHITE |

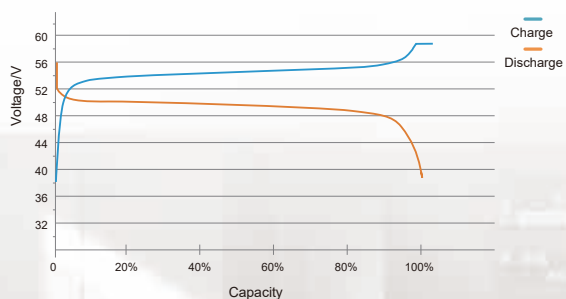
Discharge Characteristics At Various Temperatures



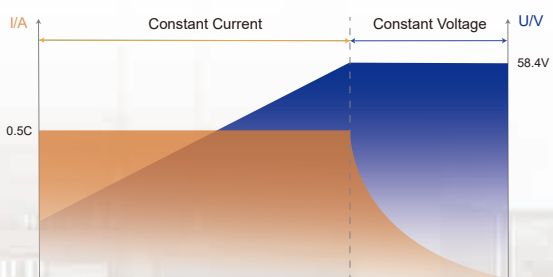
Discharge Characteristics At Various Rates



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.