



280AH 12V LiFePO4 Battery

Technology

FEATURES:

- Built for Fire Safety & Easy Control**
 Heavy-duty metal casing provides superior heat resistance and fire protection compared to plastic designs. The built-in low-current power switch lets you safely cut off power with one touch during installation or maintenance—reducing spark risk and improving overall safety.
- Install Directly, No Battery Box Needed**
 Designed with a rugged metal enclosure and 4 mounting feet, this battery can be installed directly in your RV or camper—no extra battery box required. Save space while keeping your setup clean, secure, and organized.
- Stable Power on Any Road**
 Reinforced metal housing and internal cell supports minimize movement and absorb vibration during travel. Whether on highways or off-road terrain, it stays stable and protected—ideal for RV, van life, and mobile setups.
- Smart Monitoring & Cold Protection**
 Track voltage, capacity, and battery status in real time via the Bluetooth app. The smart BMS also prevents charging in low temperatures, protecting the cells and extending battery lifespan.
- Premium Cells with 200A Protection**
 Built with Grade A LiFePO4 cells and a powerful 200A BMS, it delivers stable, high-capacity energy with full protection against overcharge, over-discharge, overheating, and short circuits—for reliable, long-term performance.

Lithium Iron Phosphate (LiFePO4)	
Nominal Voltage	12.8V
Rated Capacity	280Ah
Charge Method	CC/CV
Charge Voltage	14.6V
Bulk/Absorption Voltage	14.6V
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	14.6V
Discharge Cut-off Voltage	9.2V
Recommended Charge Current	140A
Recommended Discharge Current	140A
Maximum Continuous Charge Current	200A
Maximum Continuous Discharge Current	200A
Peak Current	220A(10s)
Wifi	No
Bluetooth	Yes
Communication	No
Self Heating	No
Protection Rating	IP30
BMS Protection	- Over and Low voltage - Charge and Discharge Over current - Short circuit - High and Low temperature
Internal Resistance	$\leq 10m\Omega$
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	4000 cycles

Supported Series-Parallel Modes

2P、3P、4P、2S、3S、4S、2P2S、
2P3S、2P4S、3P2S、4P2S

Unit Dimensions



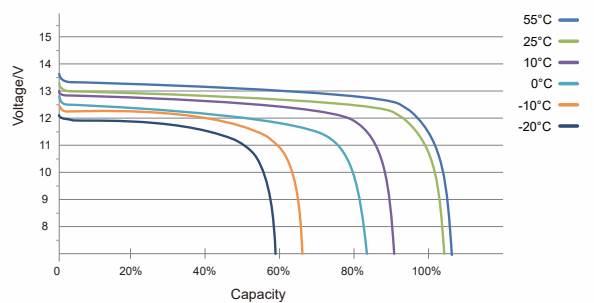
Mechanical

Length	16.54in / 420mm
Width	8.64 in / 219.3 mm
Height	9.65 in / 245 mm
Weight	68.5 lbs / 31.05 kg
Terminals	M8 insert

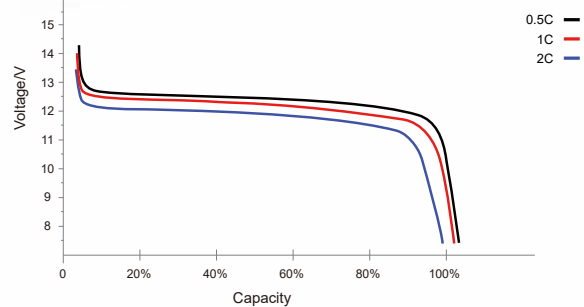
Materials

Case and Cover	Metal
Color	Black

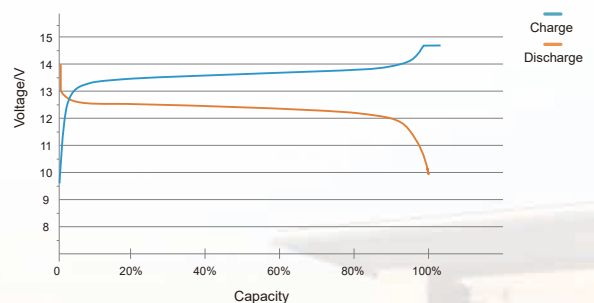
Discharge Characteristics At Various Temperatures



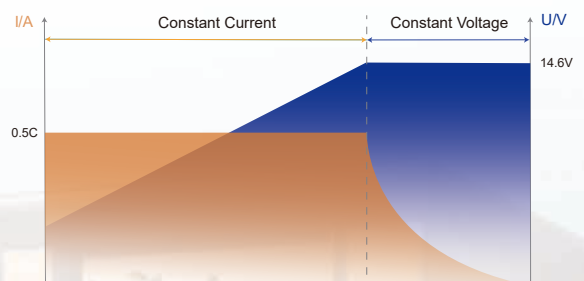
Discharge Characteristics At Various Rates



Charge & Discharge Voltage Characteristics



LiFePO4 Battery Charging Logic @0.5C



PLEASE NOTE

- ★ 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.