

# LiFePO4 Battery

## POW-200AH-25.6V

POWMr

### Perfect Upgrade Replacement:

The ideal upgrade replacement for lead-acid battery packs with high energy density.

### A-Grade Cells:

Safe and efficient.

### Long Cycle Life:

0.2C discharge, at 25°C and 80% DOD, cycle life exceeds 2000 cycles.

### High Capacity and Endurance:

Supports up to 5120W continuous load power, capable of powering multiple loads simultaneously.

### Comprehensive Protection:

Built-in safe, reliable, and highly compatible BMS, ensuring energy storage safety.

### More Energy Storage:

Store more energy within the same volume.

### Efficient Charging:

Recommended charging current of 100A, achieving full charge in as little as 2 hour.

### Flexible Configuration:

Configurable up to 2 in series and 2 in parallel, achieving a total capacity of up to 400Ah, a total voltage of up to 51.2V, and a total energy of up to 20.48kWh.



Overvoltage



Undervoltage



Overcurrent



Short Circuit



Overtemperature



## Product Overview

The POW lithium battery series delivers exceptional performance, capacity, and reliability. Utilizing the latest high-power battery technology, the POW lithium batteries are designed for applications in environmentally sensitive areas that require enhanced commercial cycle life capabilities. These batteries are widely used across industrial, residential, commercial, and private sectors, meeting a diverse range of needs. With a maintenance-free structure and advanced design features, the POW lithium series is the ideal choice for various markets, including solar and renewable energy storage, electric vehicles, golf carts, industrial equipment, floor machines, forklifts, aerial work platforms, and robotics; marine, RV, and idle-free solutions; mobile and medical equipment; as well as telecommunications, broadband, and cable TV UPS systems. The POW lithium battery series, with its superior technology and reliability, ensures optimal performance in all applications.

## BATTERY SPECIFICATION

Battery Type-Chemistry	LiFePO4
Nominal Voltage	25.6V
Nominal Capacity	200Ah
Energy Density	5120Wh
Dimensions (LxWxH)	532x207x215mm
Weight	38kg
Terminal Type	M8
Terminal Torque	8.5Nm
Case Material	ABS
BMS Built-in	Yes
Internal Resistance	≤40 mΩ
Self-Discharging Per Month	<3%
Max in Parallel	2
Max in Series	2
Charging Voltage	29.2V
Max Discharge Voltage	20V
Recommended Charging Current	100A
Max Continuous Discharge Current	200A
Cycle Life (0.2C, 25°C@80% DOD)	2000 Cycle
Discharge Temperature	-20~60°C
Charge Temperature	0~55°C
Storage Temperature	-20~45°C

## BMS CHARACTERISTICS

Protection Type	Item	Min	Typical	Max
Overcharge	Protection Voltage	3.70V	3.75V	3.80V
	Recovery Voltage	3.50V	3.55V	3.60V
Over-discharge	Protection Voltage	2.10V	2.20V	2.30V
	Recovery Voltage	2.60V	2.70V	2.80V
Overcurrent	Charging Current	150A	200A	220A
	Discharging Current 1	600A	800A	1000A
	Discharging Current 2	1200A	1600A	2000A
Temperature	Charge High Temp	80°C	85°C	90°C
	Discharge High Temp	80°C	85°C	90°C

Note: Delay times are defined within 10~1500ms depending on the protection type.

## Constant Current Discharge Data (Amperes@25°C) ( Cut off voltage 20V)

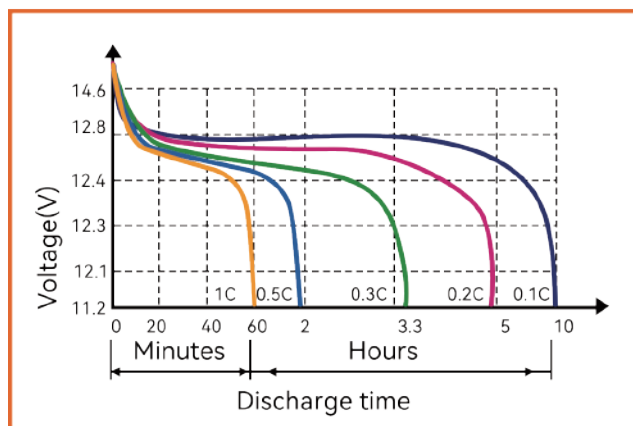
Discharging Time	1h	2h	3h	4h	5h	10h	20h
Discharging Current	200A	100A	66.67A	50A	40A	20A	10A

## Constant Current Discharge Data (Watts@25°C) ( Cut off voltage 20V)

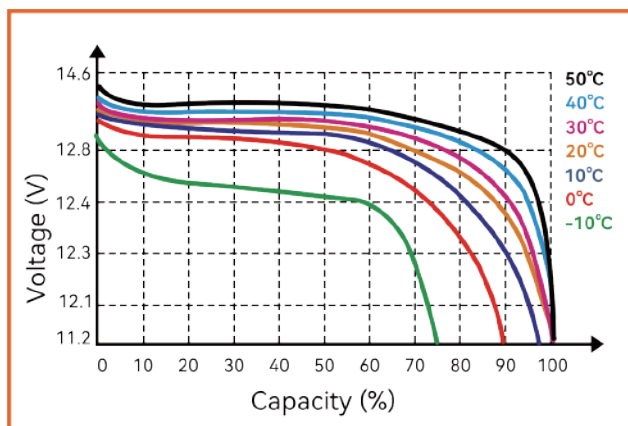
Discharging Time	1h	2h	3h	4h	5h	10h	20h
Discharging Power	5120W	2560W	1706.67W	1280W	1024W	512W	256W

## PERFORMANCE CURVE

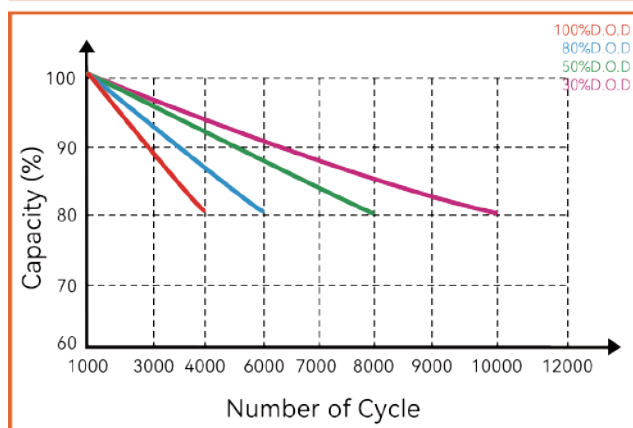
Discharge characteristics (25°C)



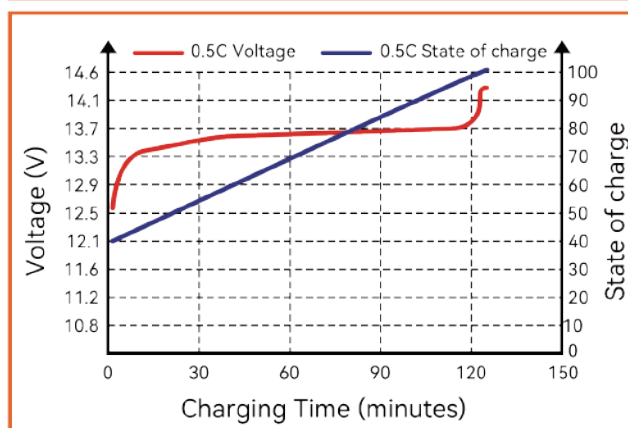
Different Temperature Discharge Curve(0.5C)



Different DOD Discharge cycle life Curve 0.2C 25°C



State of Charge Curve (0.5C, 25°C)



## Dimension



## Precautions

- Note 1:** Please always refer to the latest version of the technical manual published on our website to ensure safe and efficient operation.
- Note 2:** For parallel connections, fully discharge the batteries before connecting them in parallel, and then recharge them. For series connections, ensure the remaining capacity of each battery is the same.
- Note 3:** Parallel connections are intended only to extend backup time, not to increase output power.
- Note 4:** The company assumes no responsibility for any accidents caused by not following this user manual.