



25.6V 100Ah LiFePO₄ Battery

Model: W-B10024



FEATURES

- Longevity of service
- IP65 waterproof and dustproof
- Flame retardant rating: UL94 V-0 (Plastic shell)
- Green energy without metal contaminant
- Extremely high number of charge / discharge cycles
- Lightweight, small size
- In the extreme performance safety test, the battery will not catch fire, explode, or leak, and will be safer to use
- Sophisticated Battery Management System (BMS)

BMS OPERATION

Typical Charging Current	50A
Maximum Charging Current	100A
Typical Discharge Current	50A
Maximum Discharge Current	100A
Maximum Charge Voltage(CC/CV)	28.8V

Over Charge Protection

Voltage(Cell)	3.65V±0.05V
Delay Time	2000ms±1000ms
Recovery Voltage(Cell)	3.55V (Min 3.50V, MAX 3.60V)

Over Discharge Protection

Voltage(Cell)	2.5V±0.1V
Delay Time	2000ms±1000ms
Recovery Voltage(Cell)	3.0V±0.1V
Over Discharge Protection Release Conditions	Charging reaches recovery voltage

Over-Current Charge

Primary Charge Over Current Protection Value	120A±10A
First Stage Charge Over Current Delay	10s±3s
Over-current Charge Release Conditions	Automatic recover after a delay of 32S

Over-Current Discharge

Primary Discharge Over Current Protection Value	120A±10A
Primary Discharge Over Current Protection Delay	10s±3s
Secondary Discharge Over Current Protection Current Value	300A±60A
Secondary Discharge Over Current Protection Delay	50ms~400ms
Over-current Discharge Release	Automatic recover after a delay of 32S

Short Circuit

Short Circuit Protection Delay Time	70µs~1500µs
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Short Circuit Protection Recovery Recover by releasing load after approximately 5s

Short-Circuit Description

The short-circuit current is less than the minimum value or higher than the maximum value, which may cause the short-circuit protection to fail, and the short-circuit current exceeds 2000A, short-circuit protection is not guaranteed, and short-circuit protection testing is not recommended.

Discharge High Temperature Protection

Temperature Protection Value	149°F±9°F / 65°C±5°C
Temperature Protection Release Value	140°F±9°F / 60°C±5°C

Low Temperature Protection Of Discharge

Temperature Protection Value	-4°F±9°F / -20°C±5°C
Temperature Protection Release Value	14°F±9°F / -10°C±5°C

Charging High Temperature Protection

Temperature Protection Value	131°F±9°F / 55°C±5°C
Temperature Protection Release Value	122°F±9°F / 50°C±5°C

Charging Low Temperature Protection

Temperature Protection Value	41°F±9°F / 5°C±5°C
Temperature Protection Release Value	50°F±9°F / 10°C±5°C

High Temperature Protection Of FET(Built-in)

Temperature Protection Value	221°F~239°F / 105°C~115°C
Temperature Protection Release Value	176°F~194°F / 80°C~90°C

Balance Function

Equalizing Opening Voltage	3.45V±0.05V
Equalize the opening pressure difference	20mV
Min Balance Current	20mA
Max Balance Current	70mA
Operation Temperature	-4°F~167°F / -20°C~75°C
Storage Temperature	23°F~104°F / -5°C~40°C (Humidity below 70%, time ≤ 1 year)

Heating Function

200W

SPECIFICATIONS

Battery Type	LFP Battery
Nominal Voltage	25.6V
Nominal Capacity	100Ah
Minimum Capacity	100Ah
Nominal Energy	2560Wh
Charging Voltage	28.8V
Discharging Cutoff Voltage	22.4V
Standard Charging Current	50A
Maximum Charging Current	100A
Standard Discharge Current	50A
Continuous Discharge Current	100A
Maximum Discharge Current	100A
Shell Material	Plastic Shell
Weight	About 48.5lb/22.0kg
Initial AC (1000HZ) Internal Resistance	≤50mΩ, New battery within 3 months, ACIR, 1000HZ
Monthly Self-Discharge Rate	≤5%
Overall Dimensions	20.9x8.1x8.5in
Cycle Life(Times)(77°F±3.6°F)	≥3200

Charging Temperature

30A	32°F~50°F / 0°C~10°C
50A	50°F~68°F / 10°C~20°C
100A	68°F~104°F / 20°C~40°C
30A	104°F~131°F / 40°C~55°C
Discharge Temperature	-4°F~140°F / -20°C~60°C (The surface temperature of the cell should not exceed 140°F)
Storage Temperature	-22°F~131°F / -30°C~55°C 90%RH Max (Less than 1 month) 14°F~113°F / -10°C~45°C 90%RH Max (More than 3 months)
Recommended Storage Temperature	14°F~95°F / -10°C~35°C 85%RH Max (Battery life decreases when stored in high temperature)

If the battery needs to be stored for a long time (more than 3 months), it should be stored in an environment which require temperature at a range of 14°F to 95°F (-10 to 35°C) @ 85% RH Max and no corrosive gases. It is recommended to charge and discharge the battery every 3 months and keep the SOC between 40~50%.