ALPHA 2
Lithium Battery
Lithium Iron Phosphate Battery

2560Wh
Nominal Energy

200Ah
Nominal Capacity

12.8V
Nominal Voltage

100A
Max Charge Current

FEATURES

- Internal heat technology
- Longevity of service
- Real-Time Monitoring: Monitors the battery operation status on mobile devices in real time with the built-in Bluetooth module.
- IP65 waterproof and dustproof rating
- Flame retardant rating: UL94 V-0 (Plastic shell)
- Green energy without metal contaminant
- Extremely high number of charge / discharge cycles
- Light weight, Small size
- In the extreme performance safety test, the battery will not catch fire, explode, leak, and be safer to use
- Sophisticated Battery Management System (BMS)
BMS OPERATION

Typical Charging Current: 50A
Maximum Charging Current: 100A
Typical Discharge Current: 50A
Max Discharge Current: 100A
Maximum Charger Voltage (CC/CV): 14.4V

Over Charge Protection
Voltage (Cell): $3.65V \pm 0.05V$
Delay Time: $2000mS \pm 1000mS$
Recovery Voltage (Cell): $3.55V \pm 0.10V$

Over Discharge Protection
Voltage (Cell): $2.50V \pm 0.10V$
Delay Time: $2000mS \pm 1000mS$
Recovery Voltage (Cell): $3.00V \pm 0.10V$

Over Discharge Protection Release Conditions: Voltage self-recovery or charge recovery

Over-Current Charge
Primary Charge Over Current Protection Value: 110A ± 5A
First Stage Charge Over Current Delay: 10S ± 3S
Over-current Charge Release Conditions: Automatic recovery after a delay of 32S

Over-Current Discharge
Primary Discharge Over Current Protection Value: 110A ± 5A
Primary Discharge Over Current Protection Delay: 10S ± 3S
Secondary Discharge Over Current Protection Value: 350A ± 90A
Secondary Discharge Over Current Protection Delay: 300mS ± 200mS
Over-current Discharge Release: Automatic recovery after a delay of 32S

Short Circuit Protection Delay Time: 560μS - 960μS
Short Circuit Protection Recovery: Recover by releasing load after approximately 5s

Discharge High Temperature Protection
Temperature Protection Value: 65°C ± 5°C
Temperature Protection Release Value: 60°C ± 5°C
Low Temperature Protection Of Discharge
Temperature Protection Value: -20°C ± 5°C
Temperature Protection Release Value: -10°C ± 5°C

Charging High Temperature Protection
Temperature Protection Value: 55°C ± 5°C
Temperature Protection Release Value: 50°C ± 5°C
Charging Low Temperature Protection
Temperature Protection Value: 5°C ± 5°C
Temperature Protection Release Value: 10°C ± 5°C

High Temperature Protection Of Fet (Built-in)
Temperature Protection Value: 95°C - 110°C
Temperature Protection Release Value: 60°C - 90°C
Balance Function
Equalizing Opening Voltage: 3.45V ± 0.05V
Equalize The Opening Pressure Difference: 15mV
Min Balance Current: 150mA
Max Balance Current: 300mA
Equilibrium Type: Passive equalization
Heating Function: 100W

SPECIFICATIONS

Battery Type: LFP Battery
Nominal Voltage: 12.8V
Nominal Capacity: 200Ah
Minimum Capacity: 200Ah
Nominal Energy: 2560Wh
Charging Voltage: 14.4V
Discharging Cutoff Voltage: 11.2V
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: 48.50lb
Initial AC (1000HZ) Internal Resistance: ≤50mΩ
Monthly Self-Discharge Rate: ≤5%
Overall Dimensions: 20.9x8.1x8.5in
Cycle Life (Times) (25°C ± 2°C) ≥3200; Capacity Retention ≥80%
Charging Temperature (0°C - 10°C): 30A
10°C - 20°C: 50A
20°C - 40°C: 100A
40°C - 55°C: 30A
Discharge Temperature: 20°C - 60°C (The surface temperature of the cell should not exceed 60°C)

Storage Temperature
-30°C - 55°C 90% RH Max (Less than 1 month)
-10°C - 45°C 90% RH Max (More than 3 months)
Recommended Storage Temperature: -10°C - 35°C 85% RH Max (Battery life decreases when stored in high temperatures.)