



High Quality with A Grade Cells Lithium Battery





Su-mak lithium series batteries provide superior performance, capacities and reliability. Using state of high power cell technology, the lithium series is designed for environmentally sensitive areas that require enhanced cycle life capabilities in commercial.

Su-mak lithium batteries are widely used in industrial, residential, commercial and private applications. The maintenance free construction and advanced design features makes the lithium series the definitive choice for a wide variety of markets. Like solar and renewable energy storage, electric vehicle, golf cart and industrial equipment, floor machines, forklifts, aerial lifts, and robotics; marine, RV, and no-idle solution; Mobility and Medical Equipment; Telecom, Broadband and Cable TV; UPS systems.



BATTERY SPECIFICATIONS

| | | | |
|----------------------------|---------------|----------------------------------|---------------|
| Battery type-Chemistry | LiFePO4 | Voltage Window | 21.6V-29.2V |
| Nominal Voltage | 25.6V | Recommend Charge Voltage | 28.8V |
| Nominal Capacity | 100Ah | Max Charge Voltage | 29.2V |
| Energy Density | 2560Wh | Recommend Charge Current | 20A |
| Dimensions(LxWxH) | 350*350*145mm | Max Continuous Current | 100A |
| Weight | 23KGS | Recommend Discharge Voltage | 22.4V |
| Terminal Type | Plug-in | Max Discharging Voltage | 21.6V |
| Terminal Torque | 8.5NM | Max Continuous Discharge Current | 100A |
| Case Material | SPCC | Peak Discharge Current | 150A |
| BMS build-in | Yes | Cycle life(0.2C, 25°C@80% DOD) | 6000 Cycles |
| AH Efficiency – round trip | >98% | Discharge Temperature | (-20 to 50)°C |
| Self Discharge per Month | <3% | Charge Temperature | (0 to 50)°C |
| Max in Parallel | 16PCS | Storage Temperature | (-20 to 50)°C |
| Max in Series | Not Allowed | Bluetooth(App) | Optional |
| LCD Screen | Optional | Heating Function | Optional |

BMS CHARACTERISTICS

| | | |
|-----------------------------------|-------------------------------------|------------------|
| Primary Charging Protection | Current :105A | Delay Time: 20s |
| Second Charging Protection | Current :110A | Delay Time: 2~3s |
| Primary Discharging Protection | Current :110A | Delay Time: 30s |
| Second Discharging Protection | Current :150A | Delay Time: 2~3s |
| Over Charge Voltage Protection | Voltage :59.2V | Delay Time: 1~2s |
| Over Discharge Voltage Protection | Voltage :49.3V | Delay Time: 1~2s |
| Temperature Protection | PCB Temperature≥95 Recover≤85 | °C °C |

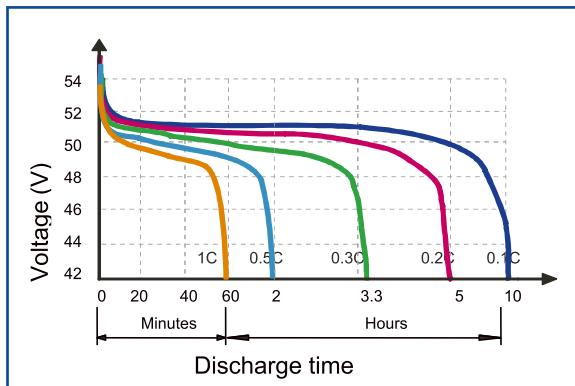
Constant Current Discharge Data (Amperes @ 25°)

| Discharge Time | 1h | 2h | 3h | 4h | 5h | 10h | 20h |
|-----------------------|------|-----|-------|-----|-----|-----|-----|
| Cut off voltage (42V) | 100A | 50A | 33.3A | 25A | 20A | 10A | 5A |

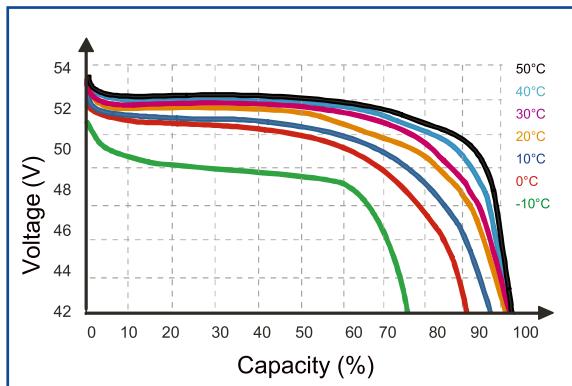
Constant Power Discharge Data (Watts @ 25°C)

| Discharge Time | 1h | 2h | 3h | 4h | 5h | 10h | 20h |
|-----------------------|-------|-------|--------|------|------|------|------|
| Cut off voltage (42V) | 2560W | 1280W | 853.3W | 640W | 512W | 256W | 128W |

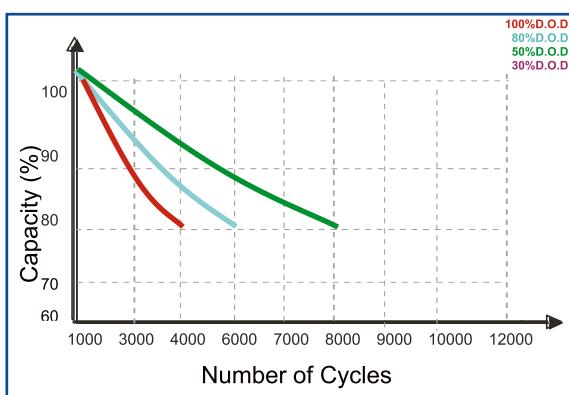
Discharge characteristics (25°C)



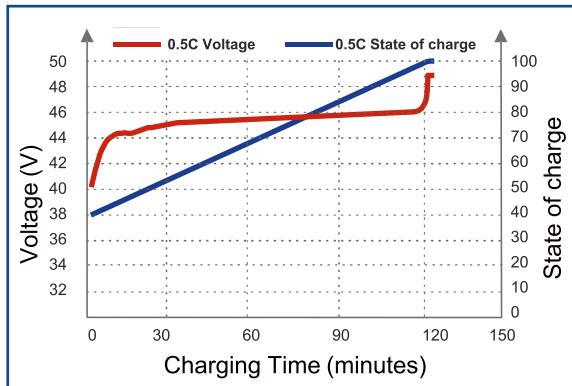
Different Temperature Discharge Curve (0.5C)



Different DOD Discharge cycle life Curve 0.2C 25°C



State of Charge Curve (0.5C, 25°C)



Note 1: Please always refer to the latest edition of our technical manual that published on our website to ensure safe and efficient operation.

Note 2: When make parallel connection, please full discharge batteries, then recharge after parallel connected; when series connect, please keep batteries with same remain capacity/

Note 3: Parallel connection is only for longer backup time, not for larger output power.