

100A LITHIUM ION BATTERY / 12V

Lithium Ion Iron Phosphate LiFePO4



Features

Cycle Life

Temperature: 77°-86°F (25-30°C) Charge, 0.2C CC to 14.6V, and CV to 200mA cut off Discharge, 0.2C DC discharge to 9.2V, 80% or more of 1st cycle capacity at 0.2C discharge of operation, cycles quantity not less than 2000 cycles.

Remarks: Rest 10 min after charge and discharge

Electrical

Standard Charge

Charging the cell initially with constant current at 0.2C and then with constant voltage at 14.6V (accuracy $\pm 0.05V$) until charging current declines to 0.02C at 77°-86°F (25-30°C)

Standard Discharge

Discharging the cell with constant current at 0.2C till cut-off voltage at 9.2V. Temperature: 77°-86°F (25-30°C)

Initial Internal Impedance

This means AC impedance of the pack measured at 1KHz after half full charged. Initial Internal Impedance $\leq 60m\Omega$

Initial Capacity

The capacity means the discharge capacity of the battery, which is measured with discharge current of 0.2C with 9.2V cut-off voltage after the standard charge. Initial Capacity @95% normal capacity. Temperature: 77°-86°F (25-30°C)

Charger Choice

- Standard charger: 14.6V/10A
- Charging mode: CC/CV
- CC: charging current $\leq 10A$
- CV: constant voltage 14.6V
- Charging cut off condition $\leq 200mA$

12-100Ah Lithium Ion Battery Specifications

Battery Type LiFePO4

Normal Capacity 100Ah

Nominal Voltage 13.2V

Standard Charge

Battery operation temperature range @charging 0~45°C

Normal charge voltage 14.6 \pm 0.1V

Recommended float charge voltage (for standby use) 13.9 \pm 0.1V

Allowed MAX charge current 80A@Battery initial Temp 25 \pm 5°C

Recommended charge current $\leq 60A$

Standard discharge

Battery operation temperature range @discharging -20~60°C

Output Voltage Range 8~14.6V

Allowed discharge current 100A withstand 10min @ Battery initial Temp 25 \pm 5°C

Peak discharge current 350A withstand 3s

Discharge Cut-off voltage 9.2V

Mechanical Characteristics

Size (L*W*H) 12.52"*6.49"*8.46" (318mm*165mm*215mm)

Weight 27.2lbs (12.2Kg)

Storage

Storage temperature & Humidity Range

Short: within one month -20~35°C 45~75%RH

Long term: above one month -10~30°C, 45~75%RH

Self-discharge rate capacity $\leq 3\%$ per month $\leq 15\%$ per year

Reversible capacity $\leq 1.5\%$ per month; $\leq 8\%$ per year

*** Please note that these battery specifications are subject to change without notice.