

# LFP12-100 12V 100Ah (10hr)

## Attention:

- When the battery needs to be used in parallel or in series, each battery shall be fully charged according to the standard charging method before parallel or in series.
- Duration of maximum constant current is thermally limited by internal electronics and depends on ambient temperature.



## Nominal Characteristics

Nominal Voltage	Nominal Capacity	Energy	IR	Efficiency	Maximum Batteries in Series and Parallel
12.8 V	100Ah	1280Wh	$\leq 12\text{m}\Omega$ @ 100% SOC	$\geq 99.5\%$	2 x 4

## General Features

- Iron-V Lithium Iron Phosphate Battery
- Cost Effectiveness
- Longer Service Life
- Guaranteed Safety
- Fast Charge
- Drop-in Replacement

## Charge & Discharge Characteristics

Voltage Window	10.8-14.6V
Max. Continuous Charge Current	100A
Max. Continuous Discharge Current	100A
Peak Discharge Current	200A (15s $\pm$ 2s)
Recommended charge current/A	50A
Recommended discharge current/A	50A
Charge current cut-off/A	3A

## Mechanical Characteristics

Case Material	ABS
Length (mm)	306
Width (mm)	169
Height (mm)	215
Weight (kg)	10.3
Terminal Type	M8
IP Grade	/
BCI Group NO.	27
Cell Type-Chemistry	Prismatic LiFePO <sub>4</sub>

## BMS Characteristics

Primary Charging Protection	Current: $>105.0 \pm 2.5\text{A}$	Delay time: $15 \pm 2\text{s}$
Secondary Charging Protection	Current: $>125.0\text{A} \pm 2.5\text{A}$	Delay time: $3 \pm 1\text{s}$
Primary Discharging Protection	Current: $>105.0 \pm 2.5\text{A}$	Delay time: $20 \pm 1\text{s}$
Secondary Discharging Protection	Current: $>210.0\text{A} \pm 2.5\text{A}$	Delay time: $3 \pm 1\text{s}$
Over-charge Voltage Protection	Voltage: $>14.8 \pm 0.2\text{V}$	Delay time: $2 \pm 0.5\text{s}$
Over-discharge Voltage Protection	Voltage: $<9.6 \pm 0.2\text{V}$	Delay time: $2 \pm 0.5\text{s}$
High Temperature Protection	Charging: $65 \pm 3^\circ\text{C}$	Recover: $60 \pm 3^\circ\text{C}$
	Discharging: $65 \pm 3^\circ\text{C}$	Recover: $60 \pm 3^\circ\text{C}$
Low Temperature Protection	Charging: $0 \pm 3^\circ\text{C}$	Recover: $3 \pm 3^\circ\text{C}$
	Discharging: $-20 \pm 3^\circ\text{C}$	Recover: $-15 \pm 3^\circ\text{C}$

## Operating Conditions

Cycle Life	$\geq 2000$
Operating Temperature	Charge: $10^\circ\text{C} \sim 45^\circ\text{C}$ Discharge: $-20^\circ\text{C} \sim 55^\circ\text{C}$
Storage Temperature	$20^\circ\text{C} \sim 30^\circ\text{C}$
Storage Duration	12 months at $25^\circ\text{C}$
Heating Function	Charging heating (Optional) $<1^\circ$ , ON $>6^\circ\text{C}$ , OFF

### Constant Current Discharge Data (Amperes at 25°C)

	1h	2h	3h	5h	10h
Cut-off voltage (10.8V)	100A	50A	33.3A	20A	10A

### Constant Power Discharge Data (Watt at 25°C)

	1h	2h	3h	5h	10h
Cut-off voltage (10.8V)	1150W	580W	388W	234W	118W

### Cycle No. Vs DOD%

