



freedom  
WON

PLUG INTO THE CURRENT FUTURE

LiFePO<sub>4</sub> Battery Range

FW 12-40

## Electrical Characteristics

Nominal Voltage	12.8V
Nominal Capacity	40AH
Energy	512Wh
Internal Resistance	≤20mΩ
Cycle Life	>2000 cycles at 0.2C 100% DOD
Months Self Discharge	<3%
Efficiency of Charge	100% at 0.5C
Efficiency of Discharge	96~99% at 1C

## Charge

Charge Volt	14V-14.6V
Charge Mode	CC at 0.2C to 14.6V, then at CV14.6V to charge current less than 0.02C
Charge Current	9A
Max. Charge Current	20A
Charge Cut-off Voltage	15.6V+/-0.2V

## Discharge

Max. Continuous Current	40A
Max. Pulse Current	80A(<3s)
Discharge Cut-off Voltage	8V

## Environment

Charge Temperature	0°C to 45°C (32F to 113F) at 60±25% Relative Humidity
Discharge Temperature	-20°C to 60°C (-4F to 140F) at 60±25% Relative Humidity
Storage Temperature	0°C to 40°C (32F to 104F) 60±25% Relative Humidity
Water Dust Resistance	IP56

## Mechanical

Cell Material	LiFePO <sub>4</sub>
Plastic Case	ABS
Dimensions(mm)	197 x 165 x 170mm
Weight (kg)	5.75 kg
Terminal	M6

## BMS

Protection Function	Over charge protection, Over discharge protection, Over current protection, Short current protection, Balanced function, Temperature protection
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