

# Datasheet - EV Power EVH-12V120AH-B

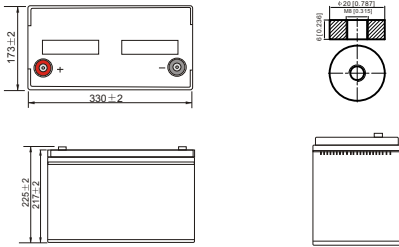
## 12V LiFePO4 Battery 120Ah

### Features of LiFePO4 Battery

- **Longer Cycle Life:** Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.
- **Lighter Weight:** About 40% of the weight of a comparable lead acid battery. A 'drop in' replacement for lead acid batteries.
- **Higher Power:** Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.
- **Wider Temperature Range:** -20°C~60°C.
- **Superior Safety:** Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation.
- **Increased Flexibility:** Modular design enables deployment of up to four batteries in series and up to ten batteries in parallel.



### Physical Dimension



- Electric vehicles, electric mobility
- Solar/wind energy storage system
- UPS, backup power
- Telecommunication
- Medical equipment
- Lighting

### Specification

Electrical Characteristics	Nominal Voltage	12.8V
	Nominal Capacity	120Ah
	Energy	1536Wh
	Internal Resistance	≤20mΩ
	Cycle Life	>2000 cycles @1C 100%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.5C
	Efficiency of Discharge	96~99% @1C
Standard Charge	Charge Voltage	14.4±0.1V
	Charge Mode	0.2C to 14.4V, then 14.4V, charge current to 0.02C (CC/CV)
	Charger Current	50A
	Max. Charge Current	100A
	Charge Cut-off Voltage	14.6V±0.1V
Standard Discharge	Continuous Current	120A
	Max. Pulse Current	350A(<1s)
	Discharge Cut-off Voltage	10V
Environmental	Charge Temperature	0 °C to 45 °C (32F to 113F) @60±25% Relative Humidity
	Discharge Temperature	-20 °C to 60 °C (-4F to 140F) @60±25% Relative Humidity
	Storage Temperature	0 °C to 40 °C (32F to 104F) @60±25% Relative Humidity
	Water Dust Resistance	IP56
Mechanical	Cell & Method	IFR32700 6Ah 4S17P
	Plastic Case	ABS
	Dimensions (mm./in.)	330*173*217mm (13.0"*6.81"*8.54")
	Weight (kg./lbs.)	13.8kg
	Terminal	M8
	In parallel	Max 4pcs
	Bluetooth Function	YES

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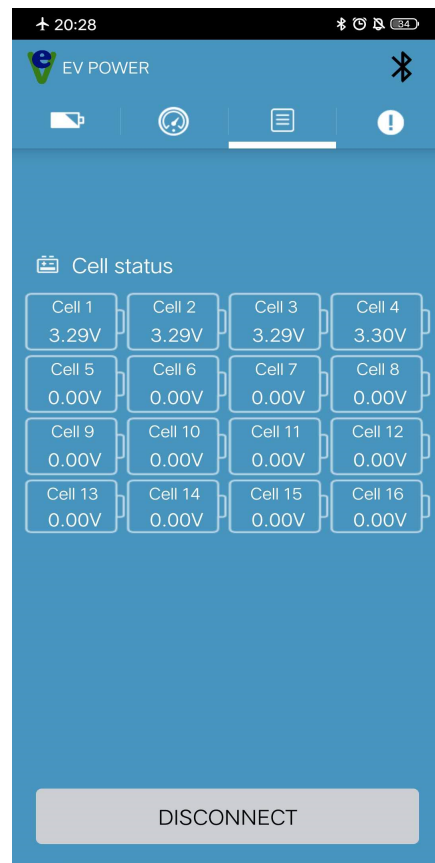
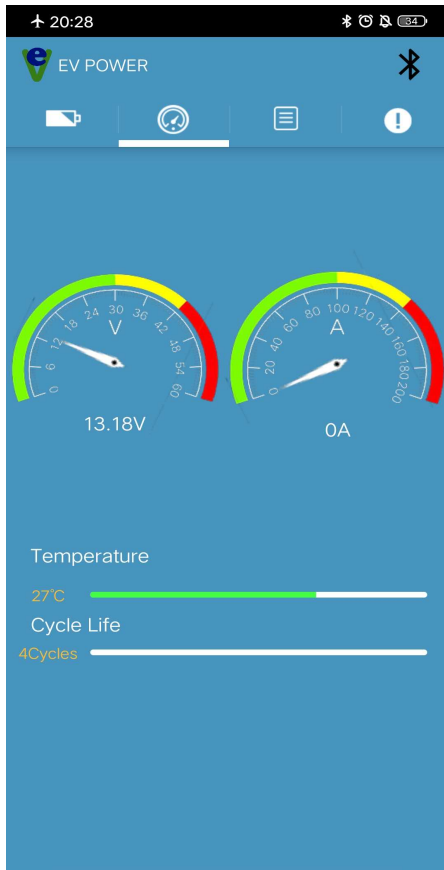
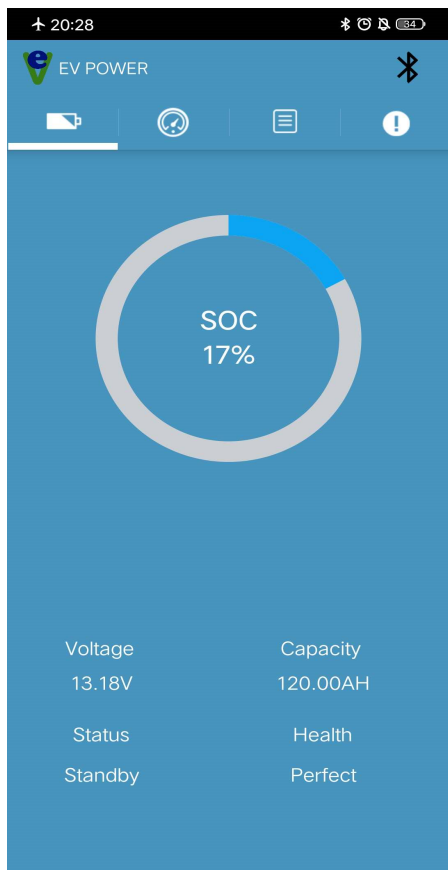
## 12V LiFePO4 Battery 120Ah

BMS bluetooth can read battery details:

- \*Voltage
- \*Single cell voltage Communication frequency
- \*Current
- \*State of charge (SOC)
- \*Charge or discharge (State)
- \*Cycles
- \*Temperature
- \*Serial Number

Note:

1. Mobile phone (tablet) hardware needs to support Bluetooth4.0 BLE (Bluetooth low energy)
2. Measuring distance:  $\leq 5\text{m}$

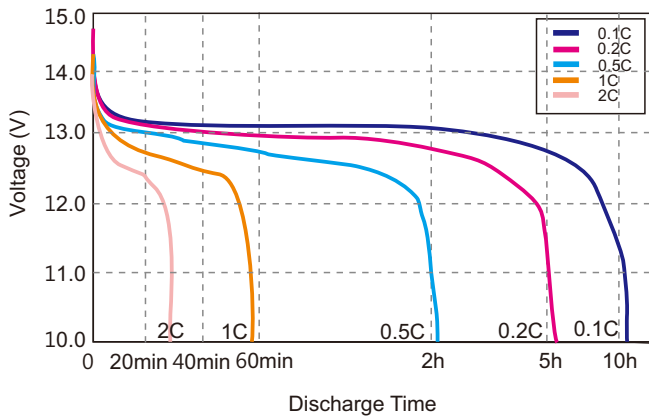


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## 12V LiFePO4 Battery 120Ah

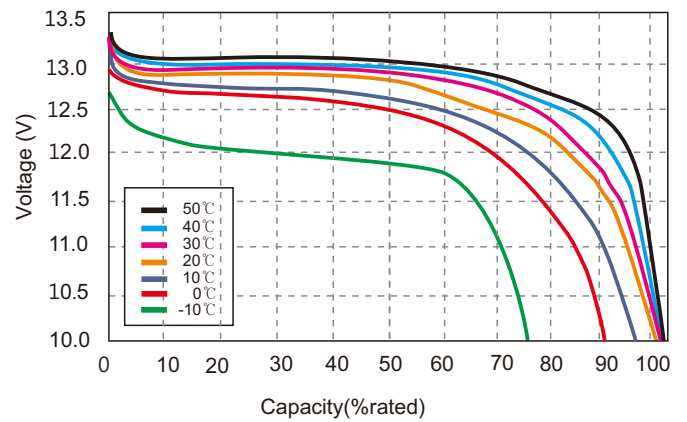
### Different Rate Discharge Curve

Different Rate Discharge Curve @25°C



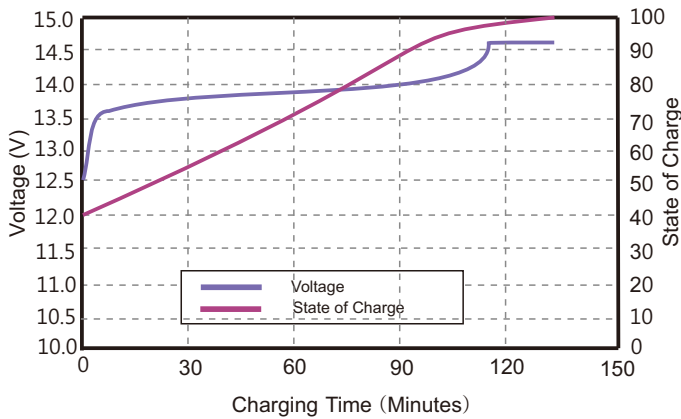
### Different Temperature Discharge Curve

Different Temperature Discharge Curve @0.5C



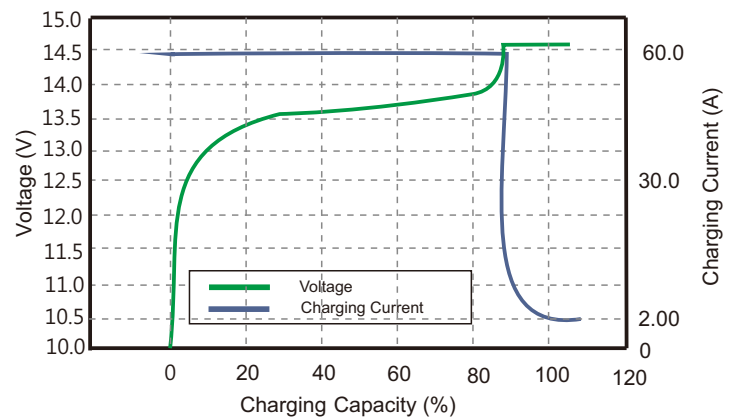
### State of Charge Curve

State of Charge Curve @0.5C 25°C



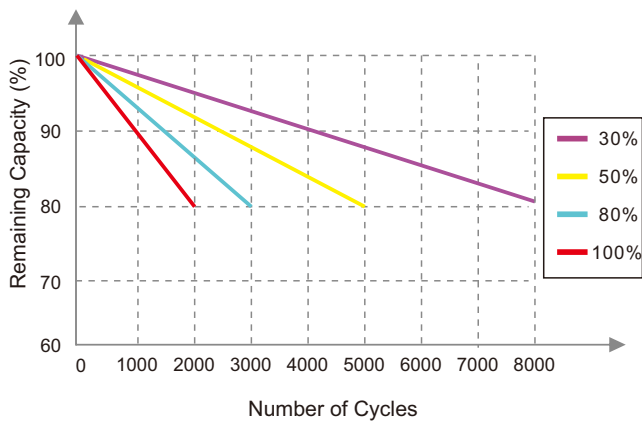
### Charging Characteristics

Charging Characteristics @0.5C 25°C



### Cycle Life Curve

Different DOD Discharge Cycle Life Curve @1C



### Self Discharge Characteristics Curve

Different Temperature Self Discharge Curve

