

# Lithium Iron Phosphate (LiFePO4) Battery Pack

## MB1220F (12V, 20Ah)



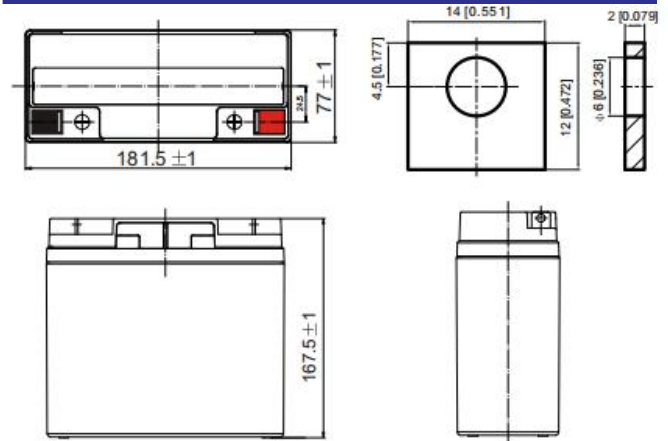
### Features of LiFePO4 Battery

- **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.

### SGS

- MSDS
- UN38.3
- IEC
- CB
- FCC

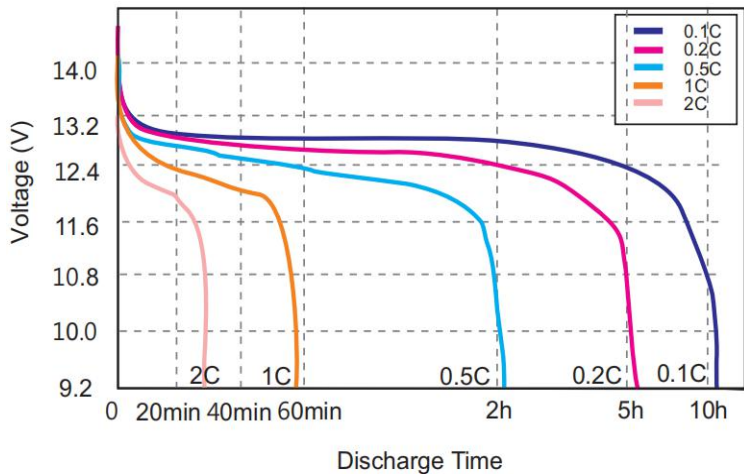
### Physical Dimension



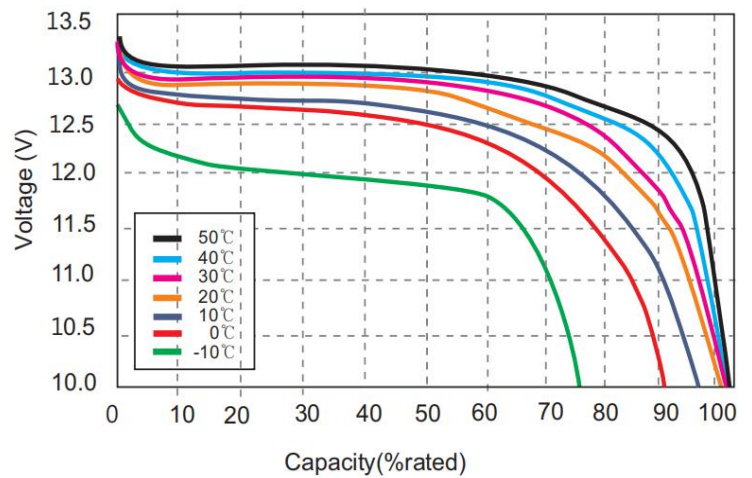
### Specification

Electrical Characteristics	Nominal Voltage	12.8V
	Nominal Capacity	20Ah
	Energy	256Wh
	Internal Resistance	≤50mΩ
	Cycle Life	>2000 cycles @0.2C 80%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.5C
	Efficiency of Discharge	96~99% @1C
Standard Charge	Charge Voltage	14.6V
	Charge Mode	0.2C to 14.6V, then 14.6V, charge current to 0.02C <sub>5</sub> A (CC/CV)
	Charger Current	10A
	Max. Charge Current	1.0C <sub>5</sub> A
	Charge Cut-off Voltage	14.6±0.03V
Standard Discharge	Continuous Current	40A
	Max. Discharge Current	50A(<3S)
	Discharge Cut-off Voltage	8V
Environmental	Charge Temperature	0°C to 45°C @60±25% Relative Humidity
	Discharge Temperature	-20°C to 60°C @60±25% Relative Humidity
	Storage Temperature	0°C to 40°C @60±25% Relative Humidity
	Water Dust Resistance	IP56
Mechanical	Cell & Method	26650 4S6P
	Dimensions (mm.)	181*77*167mm
	Weight (g.)	Approx:2.7kg

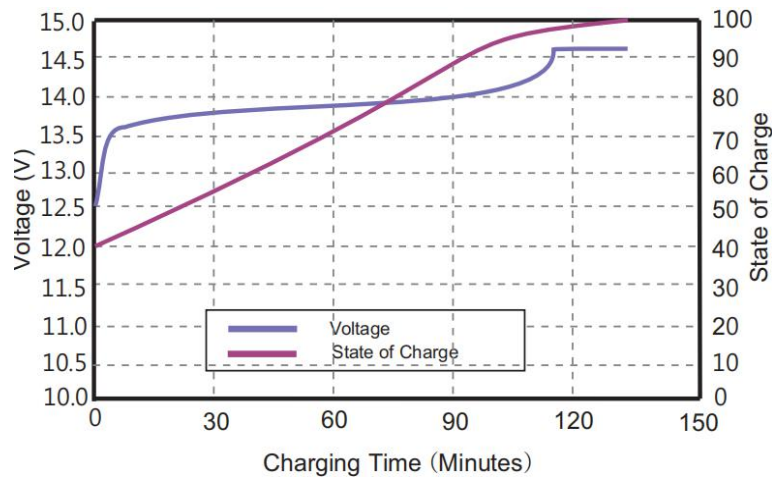
### Different Rate Discharge Curve



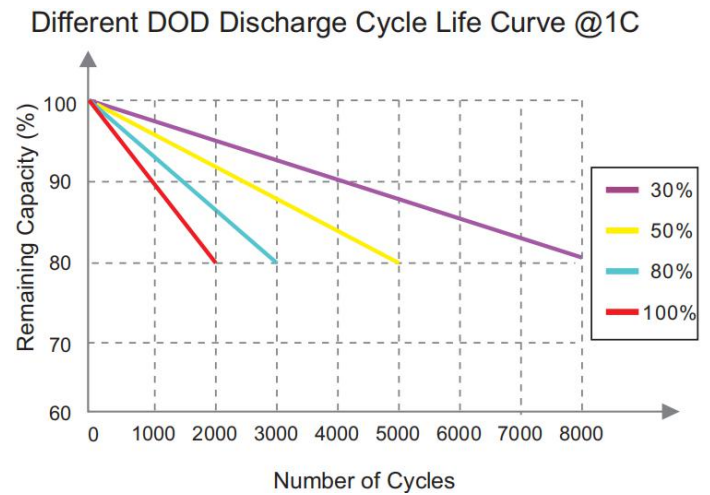
### Different Temperature Discharge Curve



### 0.5C Charge Curve

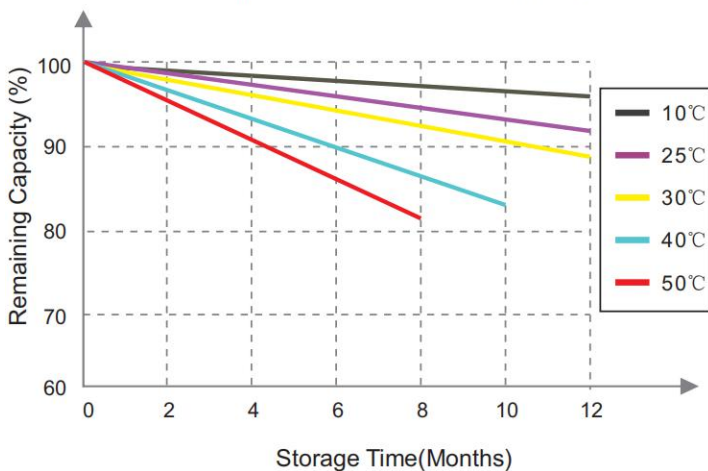


### Cycle Life Curve



### Self-discharge Curve

#### Different Temperature Self Discharge Curve



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