

# Lithium Iron (LiFePO<sub>4</sub>) Battery

HP-LFP-48100L(51.2V 100AH)

### **Features**

Longer Cycle Life: Offer up to 10 times longer cycle life and five times longer float/calendar life than lead acid battery, helping it minimize replacement cost and reduce total cost of ownership.

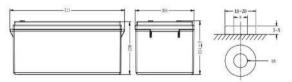
**Lighter Weight :** About 40% of the weight of a comparable lead acid battery. A'drop in' replacement for lead acid batteries.

**Higher Power :** Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.

Wider Temperature Range: -20~60°C

**Superior Safety:** Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation.

## **Dimension-mm**





## **Application**

- Solar/Wind energy Storage
- Golf cart
- Back-up Power for UPS/EPS
- Tools

Specification		
Basic Parameters	Rated Voltage	51.2V
	Rated Capacity	100Ah
	Rated Energy	5120wh
	Internal Resistance ( AC )	≤50mΩ
	Cycle Life	≥3500 cycles @80%DOD
	Self Discharge	1%/months
	Efficiency of Charge	≥97%
	Efficiency of Discharge	≥98%
Charge	Charge Voltage	57.6V
	Charge Current (Recomm.)	20A
	Charge Current (Max.)	100A
Discharge	Discharge Cut-off Voltage	43.2V
	Discharge Current(Recomm.)	50A
	Pulse Current	120A(3S)
Environmental	Charge Temperature	0°C to 60°C
	Discharge Temperature	-20°C to 60°C
	Humidity	5% to 95%
Physical Characteristics	IP Class	IP30
	Terminal	M8
	Plastic Case	ABS
	Dimensions ( in. /mm. )	522*240*218mm
	Weight ( lbs. /kg. )	36.5kg
	Others( optional )	Bluetooth,Shell color,IP rating



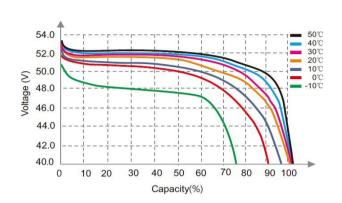
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HP-LFP-48100L(51.2V 100AH)

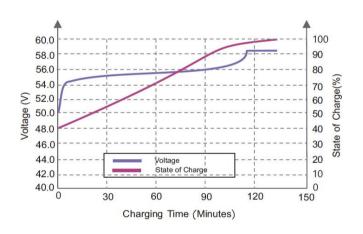
## Different Rate Discharge Curve (25℃)

# 56.0 52.8 49.6 49.6 40.0 36.8 1C 0.1C 0.2C 0.5C 1C 0.5C 0.2C 0.1C 0.5C 0.2C 0.1C 0.5C 0.5C 1C 0.5C 0.5C

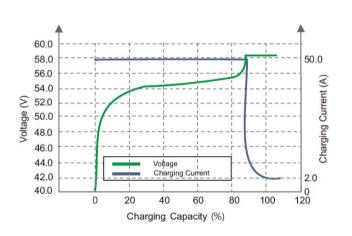
# Different Temperature Discharge Curve (0.5C)



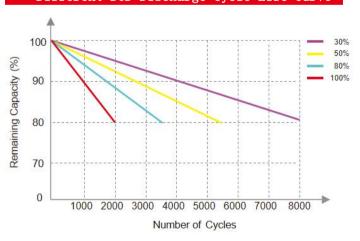
## State of Charge Curve (0.2C, 25°C)



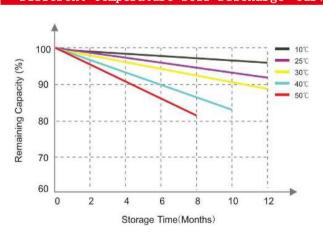
# Charging Characteristics (0.2C, 25°C)



## Different DOD Discharge Cycle Life Curve



## Different Temperature Self Discharge Curve















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