



Arka

Electric propulsion systems

Lithium Iron Phosphate (LiFePO4) Battery 48V 100AH

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 max ten batteries in parallel.



Specification of battery pack

Electrical Characteristics	Nominal Voltage	51.2V
	Nominal Capacity	100Ah
	Energy	5120Wh
	Internal Resistance	≤200mΩ
	Cycle Life	>2000 cycles @1C 100%DOD; >3000 cycles @1C 80%DOD;
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.5C
	Efficiency of Discharge	96~99% @1C
Standard Charge	Charge Voltage	57.6±0.2V
	Charge Mode	CC/CV
	Recomm.Charge Current	20A
	Max. Charge Current	100A
Standard Discharge	Continuous Current	100A
	Max. Pulse Current	500A
	Discharge Cut-off Voltage	40V
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
Mechanical	Plastic Case	ABS+PC UL V-0 flame resistant
	Dimensions (in./mm.)	L520*W267*H220mm
	Weight (lbs./kg.)	42kg
	Terminal	M8
	Protocol (optional)	Bluetooth + RS232

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