PKNERGY 12V 50Ah LiFePo4 Replacing Lead Acid Battery

PKNERGY Lithium Iron Phosphate (LiFePO4) batteries are developed to deliver high efficiency energy output compared to equivalent lead acid batteries. They are able to accept continuous high rate charging amps which make the battery fully charged in short time and improve the load service efficiency significantly. The built-in advanced BMS ensures intelligent automatic protection against over voltage, over current, over discharge, over temperature.

Features:

A. Extremely safe and stable chemistry: PCB and/or BMS built inside to balance protect the battery.

B. Long life-cycle: Can be circularly used, best can up to 6000 times recycles , 8 times of Lead acid batt ery.

C. Lighter weight, with the best power-to-weight ratio: 1/3 of Lead acid battery weight.

D. Good performance at high temperature and high temperature resistance

E. Low self-discharge rate, less than 3% monthly.

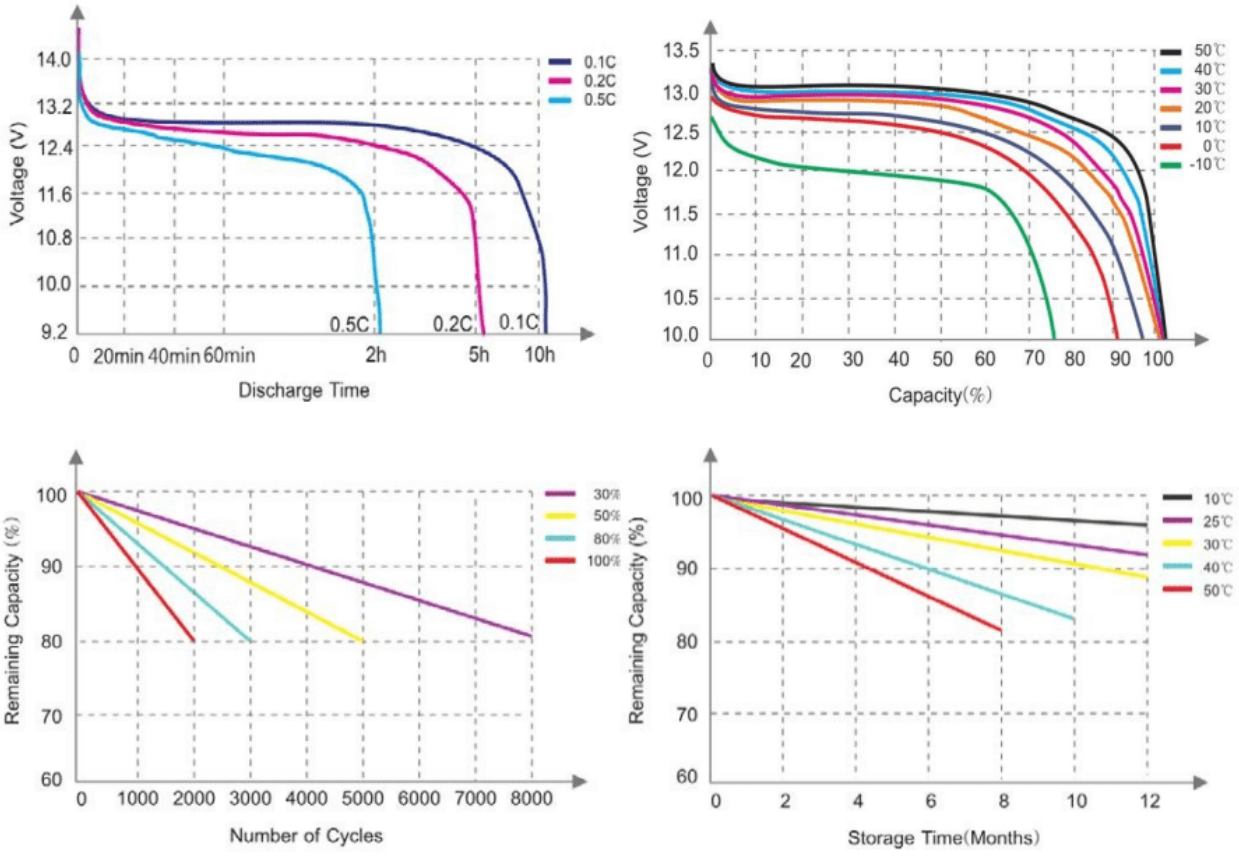
F. No memory effects and highly efficient charge.

G. Environment friendly: Clean and Green energy poses no pollution on our environment.

Specification

Electrical Character istics	Nominal Voltage	12.8V
	Nominal Capacity	50Ah@0.5C
	Energy	640Wh
	Internal Resistance	≤ 30mΩ
	Cycle Life	6000 Cycles @ 0.5C 100% DOD Guaranteed Before De
	Charge retention and capacityRecovery capability	Standard charge the battery, and then put aside atroom tem 28 d or 55 ℃ for 7d, Charge retention rate ≥ 90%, Recovery r e ≥ 90
Standard Charging	Max.Charging Voltage	14.2-14.6V
	Charging Mode	0.2C to 14.6V, then 14.6V,charge current to 0.02C (CC
	Charging Current	10A
	Max.Charging Current	25A
Standard Discharging	Discharging Current	10A
	Max. Continuous Current	25A
	Max.Pulse Current	190A(<1.5S)
	Discharging Cut-off Voltage	10.0V
Operating Condition	Charge Temperature	0℃ to 45℃(32℉ to 113℉) @60±25% Relative Humic
	Discharge Temperature	-20℃ to 60℃(-4℉ to 140℉) @60±25% Relative Humi
	Storage Temperature	0℃ to 45℃(32℉ to 113℉) @60±25% Relative Humic
	Water Dust Resistance	IP55
	Casing	Plastic
	Dimension(L*W*H)	229*138*208mm
	Weight	Approx：6.5Kg
	Terminal	M6

Discharge performance graph



Safe Characteristic

No.	Item	Testing Instruction	Re
1	Over- charge test	Charge in accordance with the following two ways (Choosing one bet ween the two).(1) Charge at 1 Ccurrent for 9 0 min or until voltage of some single battery reaches 5 . 0 V (stop test when fulfills eithercondi tion).(2) Charge at 3 C current until the voltage of some single battery reaches 10 . 0 V, then stop the test.	The no or
2	Over- discharge test	Charge the battery. Place at 20±5℃ for 1h, then discharge in 1 / 3 C c urrent at same emperature until some cell’ s voltage is 0 V	The no or
3	Short- ircuiting Test		

Product link：https://www.pknergy.com/12v-50ah-lifepo4-replacing-lead-acid-battery-product/