

Lithium Iron Phosphate (LiFePO₄) Battery

AK-LFP Series

Main Features

- ▶ 6,000+ cycles at 90% DOD with 70% capacity retention – engineered for superior durability and long-term reliability.
- ▶ Built-in automatic protection for over-charge, over discharge, over current and over temperature
- ▶ Maintenance free
- ▶ Internal cell balancing
- ▶ Lighter weight: About 40% ~50% of the weight of a comparable lead acid battery.
- ▶ Can be charged using most standard lead-acid charges (set)
- ▶ Wider temperature range:-20°C ~60°C

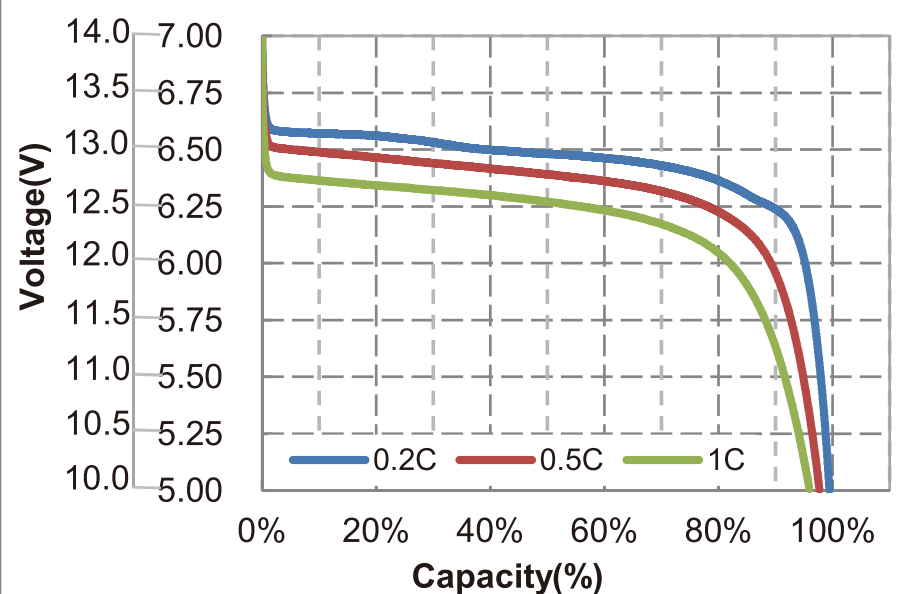


Application

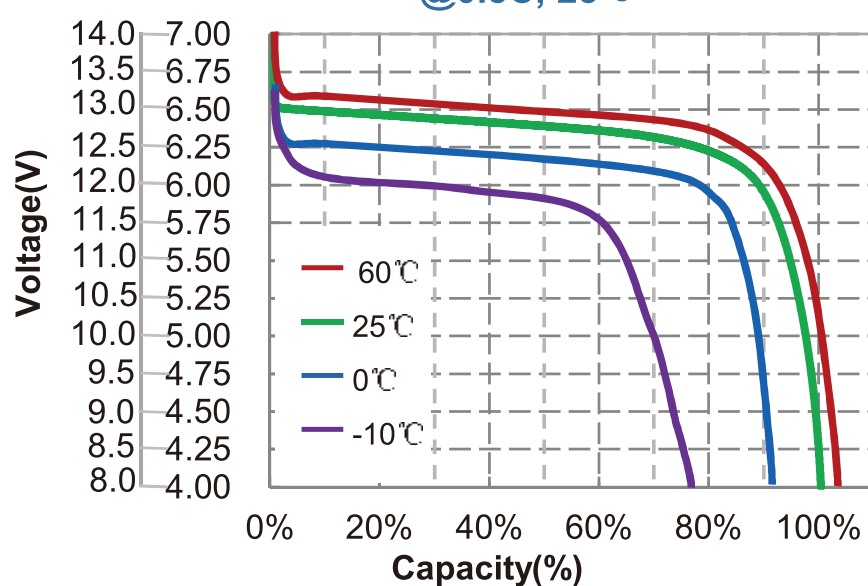
- ▶ UPS
- ▶ Solar & Wind power system
- ▶ Golf Cart
- ▶ Electric vehicle, E-bike, E-rickshaw e.g.
- ▶ Lighting



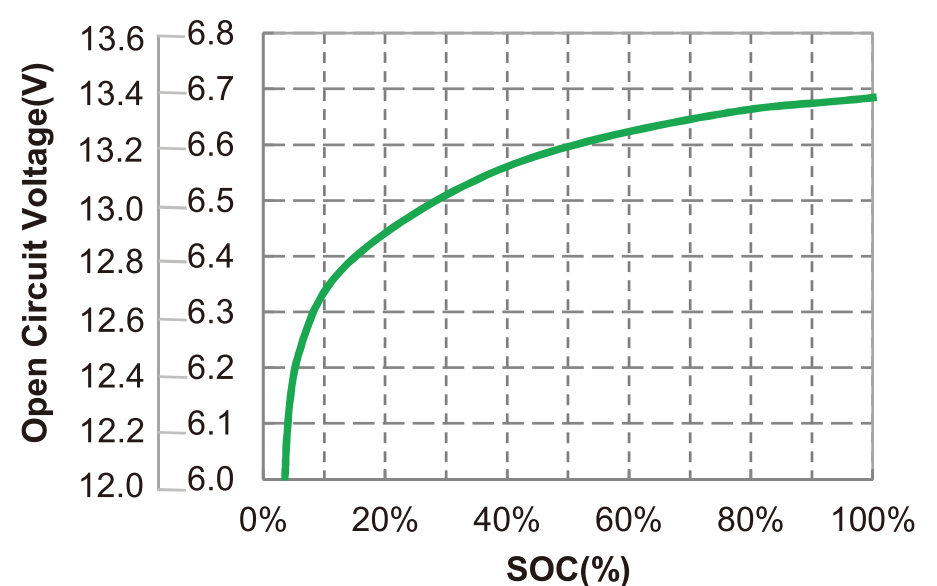
Different Rate Discharge Curve @ 25°C



Different Temperature Discharge Curve @0.5C, 25°C



Open circuit voltage VS SOC%





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AK-LFP Series

Technical Parameter

MODEL : AK-LFP-	12V-7Ah	12V-9Ah	12V-21Ah	12V-36Ah	12V-50Ah	12V-100Ah	12V-150Ah	12V-200Ah
Norminal voltage	12.8V	12.8V	12.8V	12.8V	12.8V	12.8V	12.8V	12.8V
Nominal Capacity @0.2C	7.2Ah	9Ah	21.6Ah	36Ah	50Ah	100Ah	150Ah	200Ah
Energy(Wh)	92.1Wh	115.2Wh	276.4Wh	460.8Wh	640Wh	1280Wh	1920Wh	2560Wh
Cycle Life	≥6000 Cycles@0.5C/90%DOD, 25℃ , End of Life 70% Capacity							
Months Self Discharge	≤3.5% per month at 25℃							
Standard Charge								
Charge Voltage	14.4±0.2V							
Charge Mode (CC/CV)	At 0℃~50℃ temperature, charged to 14.4V at a constant current of 0.5C, and then,changed continuously with constant voltage of 14.4V until the current was not more than 0.02C.							
Max.continuous Charge Current	7.2A	10A	22A	36A	50A	100A	100A	100A
Standard Discharge								
Max. Continuous Discharging Current	10A	13A	32A	40A	50A	100A	100A	100A
Max.Pulse Current	20A @10S	20A @10S	60A @10S	80A @10S	100A@10S	200A @10S	200A @ 10S	200A @10S
Discharge Cut-off Voltage	9.8V							
Environmental								
Charge Temperature	0℃ to 50℃(32°F to 113°F)@60±25% Relative Humidity							
Discharge Temperature	-20℃ to 60℃(-4°F to 140°F)@60±25% Relative Humidity							
Storage Temperature	0℃ to 45℃(32°F to 113°F) @60±25% Relative Humidity							
Water Dust Resistance	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65
Mechanical								
Plastic Case	ABS							
Dimension(L*W*H) (mm)	90*70*107	151*65*100	181*77*167	198*166*170	229*138*213	328*172*215	328*172*215	522*240*218
Approx. Weight(Kg)	0.9	0.97	2.1	4.5	6.5	11.8	16.5	26
Terminal	T2	T2	M5	M8	M6	M8	M8	M8

Product specifications are subject to change without notice.