

POWER LITHIUM BATTERIES

Dual Purpose Deep Cycle Starting Lithium Battery

LFP12.8VNS40ZAL

Starting / Deep cycle

Features of LiFePO4 Battery

Longer Cycle Life

LiFePO4 batteries would be is five times than SLA batteries on cycle life

High Power & Light weight

LiFePO4 batteries performance twice power of SLA batteries, while half weight helpful for transport and installation

Intelligent management control

Intelligent BMS system covered by LFP batteries to ensure that batteries work on safety and perfect condition

Lower Self-discharge rate

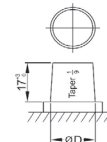
Lower Self-discharge rate to guarantee LFP batteries be stored more longer than SLA batteries



Physical Dimension

Standard Terminal

Terminal Type	D	
	Positive	Negative
1	19.5 ^{+0.3}	17.9 ^{+0.3}



Electrical Characteristics	Chemistry	LiFePO4
	Nominal Voltage	12.8V
	Nominal Capacity	20Ah
	Energy	256Wh
	Cold Cranking Amps	800CCA
	Internal Resistance	≤4.2 mΩ
	Cycle Life	≥2000 cycles
	Self Discharge Rate	≤30uA
	Efficiency of Charge	100% @0.5C
Standard Charge	Efficiency of Discharge	96-99% @1C
	Charge Voltage	14.6±0.2V
	Charge Mode	0.2C to 14.6V, then 14.6V,charge current to 0.02C (CC/CV)
	Rated Charge Current	≤10A
	Max. Charge Current	≤20A
	BMS Charge Cut-off Voltage	15.6V
Standard Discharge	Over Charge Recovery Voltage	15.2V
	Continuous Discharge Current	≤150A
	Instantaneous Discharge Current	800A(5S)
	BMS Discharge Cut-off Voltage	8V
	Over Discharge Recovery Voltage	9.2V
	Charge Temperature	0 °C to 45 °C (32Fto 113F) @60±25% Relative Humidity
	Discharge Temperature	-20 °C to 60 °C (-4F to 140F) @60±25% Relative Humidity
Mechanical	Storage Temperature	0 °C to 40 °C (32Fto 104F) @60±25% Relative Humidity
	Water Dust Resistance	IP65
	BMS Withstand voltage value	30V
	Plastic Case	ABS
	Dimensions (in./mm.)	196*127*202*221mm ± 2mm
	Weight (lbs./kg.)	5.5kg(12.10lbs)
	Terminal	Brass

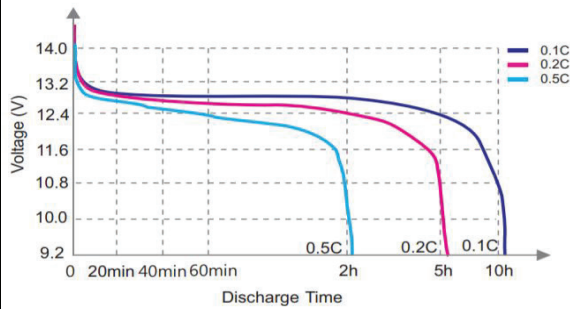
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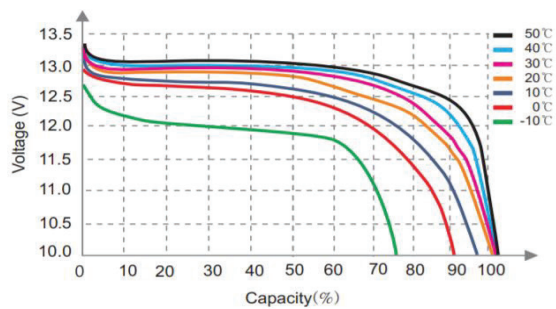
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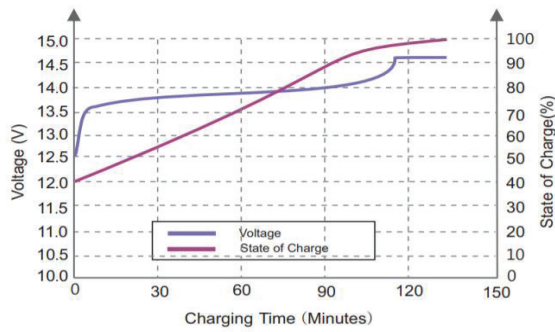
Different Rate Discharge Curve(25°C)



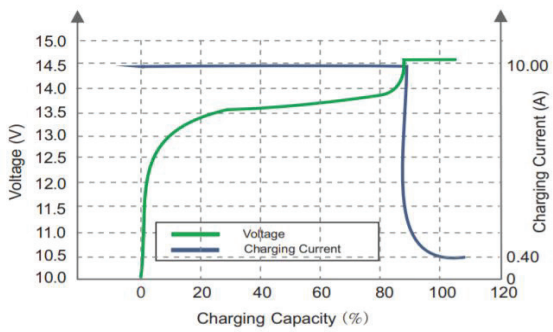
Different Temperature Discharge Curve(0.5C)



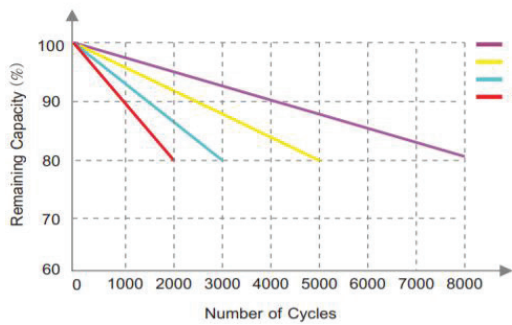
State of Charge Curve(0.5C, 25°C)



Charging Characteristics(0.5C, 25°C)



Different DOD Discharge Cycle Life Curve(1C)



Different Temperature Self Discharge Curve

