

LIFEPO4 BATTERY

Replace Lead-acid Battery

BRLFP12.8V

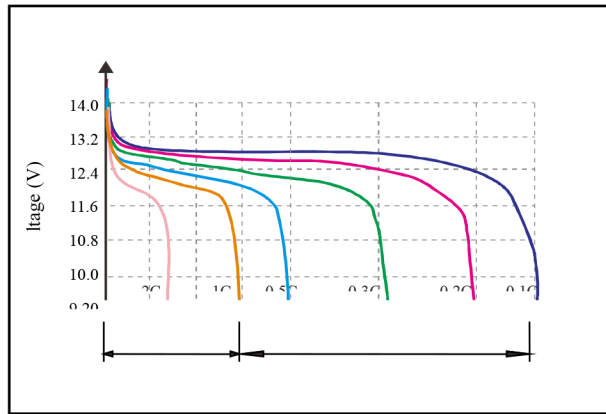
100AH/200AH/300AH/400AH



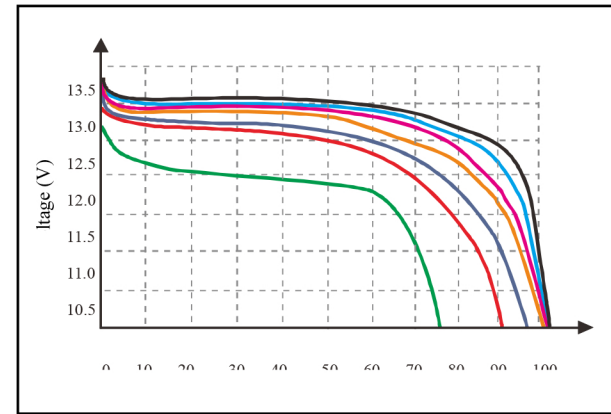
- **Longer Cycle Life:** Offers up to 3-5 times longer cycle life than lead acid battery.
- **Lighter Weight:** About 40% weight of a comparable lead acid battery, save up to 60% in weight.
- **Quick Charge:** Short charge time compared with lead acid battery.
- **Low Self-Discharge:** Lower self-discharge compared with lead acid battery, longer storage time without recharging.
- **Superior Safety:** Multi-protection methods built inside to protect the battery from overcharge, over discharge and short circuit situation.
- **High Efficient:** Higher round-trip energy efficiency of the average (92%) than lead acid battery 80% (discharge from 100% to 0% and back to 100% charged).

Performance characteristics

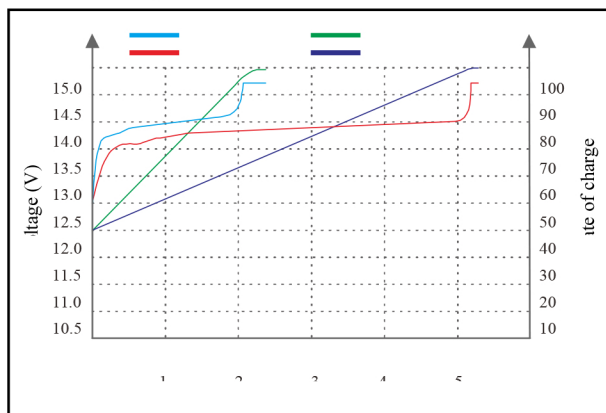
Discharge characteristics (25°C)



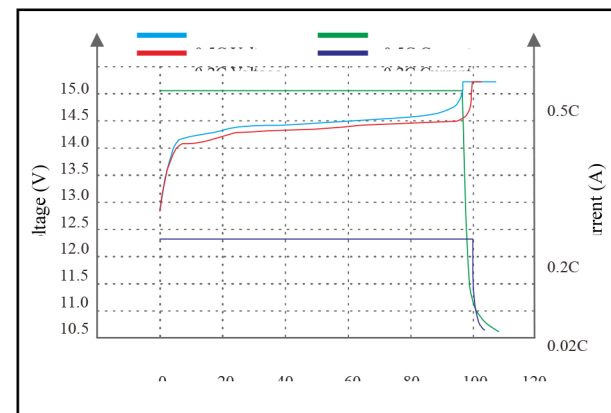
Temperature affect on discharge characteristics (0.5C)



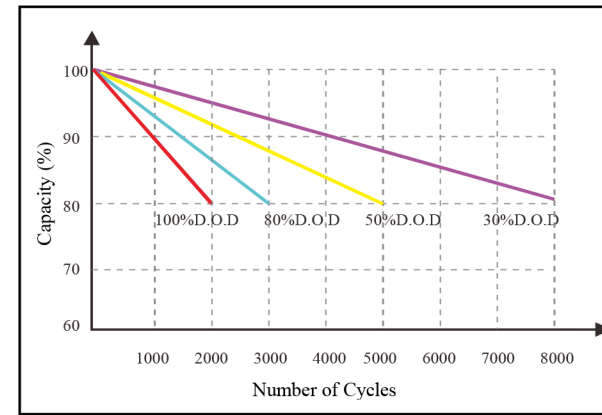
State of Charge Curve (25°C)



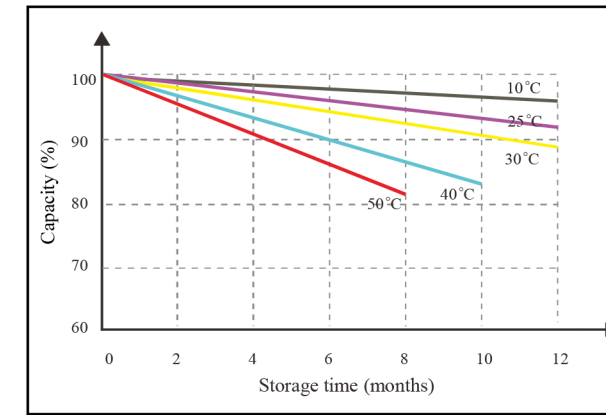
Charge characteristics (25°C)



Cycle life on D.O.D (25°C)



Self Discharge Characteristics Curve



Nominal voltage		12V	
Nominal capacity		100Ah	200Ah
Dimensions	Length	330±2mm (12.99inch)	522±2mm (20.47inch)
	Width	172±2mm (6.73inch)	240±2mm (10.59inch)
	Height	215±2mm (8.43inch)	218±2mm (8.66inch)
	Total height	220±2mm (8.66inch)	224±2mm (8.82inch)
Approx. weight		12.5kg (39.24lbs)±4%	21.50kg (60.63lbs)±4%
Electrical Parameters (25°C)	Rated Voltage	12.8V	
	Rated Capacity (C5)	100Ah@25°C	100Ah@25°C
	Energy	1280Wh	2560Wh
	Months Self Discharge	<3%	
	Charge Efficiency	99.5%@ 0.2C	
	Discharge Efficiency	96-99%@ 1C	
Terminal type		T16	
Internal resistance (Fully charged, 25°C)		≤14mΩ	≤100mΩ
Cycle life		>2000 cycles @ 0.2C 100%D.O.D	
Capacity affected by temperature	40°C	101%	
	25°C	100%	
	0°C	90%	
	-10°C	75%	
Nominal operating temperature		25C± 3°C (77°F± 5°F)	
Operating temperature range	Discharge	- 20°C~60°C (4F ~ 140°F)	
	Charge	-10°C~ 50°C(14°F ~ 122°F)	
	Storage	0°C~40°C (32F ~ 104°F)	
Water Dust Resistance		IP65	
Charge Voltage		14.6V	
Standard Charge Mode (25°C±2°C,<75%RH)		0.2CA Constant Current to 14.6V, then Constant Voltage 14.6V until the current drops to 0.02CA, before use, rest 30 minutes	
Charge Current		20A	40A
Maximum Charge Current		50A	100A
Charge Cut off Voltage		14.6V	
Continuous Discharge Current		50A	200A
Maximum Pulse Current		150A (<100ms)	650A (<100ms)
Discharge Cut Off Voltage		11.2V	
Communicate Protocol (optional)		(default none)SMBus/RS485/RS232	
SOC (optional)		(default none) LED/Bluetooth	(default none) LED
Application connection		1 string 1 parallel	
Mechanical	Cells	4 Strings	
	Container	ABS	