

GVLB 12-50 12V50AH

LITHIUM IRON PHOSPHATE BATTERY



Global Power lithium series batteries provide superior performance, capacities and reliability. Using state of high power cell technology, the lithium series is designed for environmentally sensitive areas that require enhanced cycle life capabilities in commercial.

Global Power lithium batteries are widely used in industrial, residential, commercial and private applications. The maintenance free construction and advanced design features makes the lithium series the definitive choice for a wide variety of markets. Like solar and renewable energy storage, electric vehicle, golf cart and industrial equipment, floor machines, forklifts, aerial lifts, and robotics; marine, RV, and no-idle solution; Mobility and Medical Equipment; Telecom, Broadband and Cable TV; UPS systems.

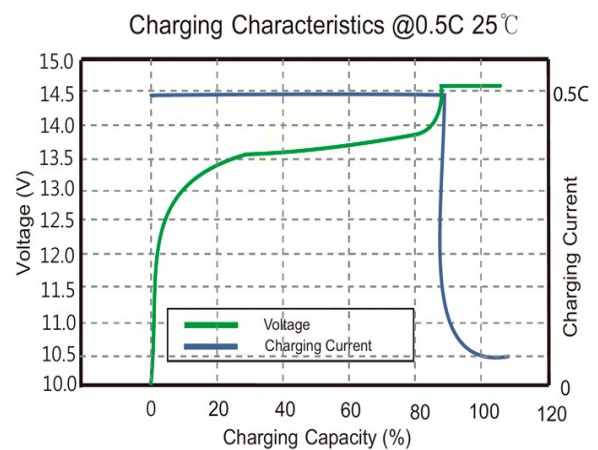
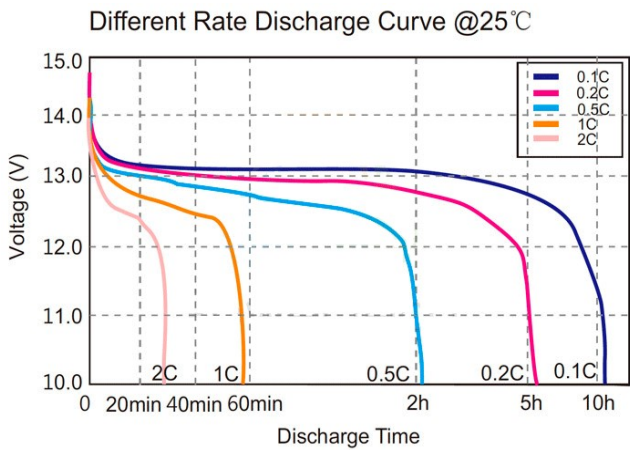
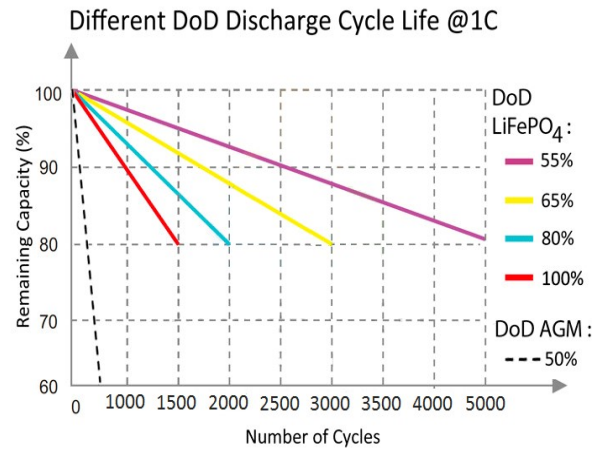
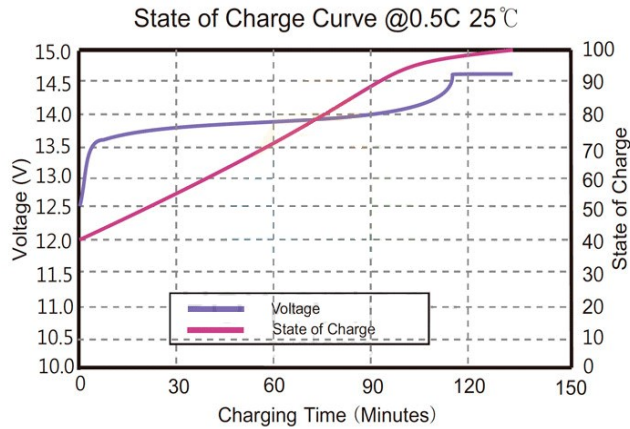
Specifications

Nominal Voltage	12V (12.8V)	
Nominal Capacity	50Ah	
Dimensions	Length	260mm
	Width	175mm
	Height	210mm
Approx. Weight	7.5kg	
Terminal Type	M6 Screw	
Case Material	ABS	
Enclosure Protection	IP56	
Cell Type	Prismatic - LiFePO4	
Temperature Specification	Discharge Temp.	-20°C to 60°C
	Charge Temp.	0°C to 45°C
	Storage Temp.	-20°C to 40°C
	BMS High Temp.	80°C
	Reconnect Temp.	50°C
Capacity @10A	5HR	
Energy	640WH	
Internal Resistance	≤50mΩ	
Efficiency	99%	
Self-discharge	< 3% per month	
Support Bluetooth	Yes	
Max. Modules in Series	1	
Max. Cont. Discharge Current	50A	
Peak Discharge Current	100A	
BMS Discharge Current	200A±100A (10mS)	
Recommended Cut-off Voltage	10V	
BMS Discharge Voltage Cut-off	9.2V	
Short Circuit Protection	200-600 μs	
Recommended Charge Current	10A-20A	
Max. Charge Current	50A	
BMS Charge Voltage Cut-off	14.6V (1±0.2S)	
Reconnect Voltage	14.2V-14.6V	
Balancing Current	20mA	
Balancing Voltage	3.5V	
Charge Current (-20°C to -10°C)	≤0.05C	

Feature & Benefits

- High Cycle Life : >2000 times @80%DOD for effectively lower cost of ownership.
- Built-in BMS Protection: Battery Management System are incorporated to protect battery from OVER CHARGING, OVER DISCHARGING, SHORT CIRCUIT.
- LIGHT WEIGHT: Dry power lithium batteries has higher energy density, wh/kg also being up to 1/3 of SLA battery.
- WIDE OPERATING TEMPERATURE RANGE: Suitable for users in a wider range of application where ambient temperature is unusually high: up to +60°C.
- STEADY OUTPUT VOLTAGE, VIBRATION & SHOCK RESISTANT, NO MEMORY EFFECT, PRESSURE RESISTANT CELLS.

Performance Curves



SUITABLE APPLICATIONS

- Lithium Iron Phosphate can be used in any application that would normally use Lead Acid, GEL, or AGM type batteries.
- LiFePO₄ in 4S=12.8V and 8S=25.6V is closed to Lead Acid equivalents of the Lithium rechargeable types.
- Suitable applications included caravan, marine, golf carts, solar storage, remote monitoring, switching applications.

CAUTIONS

- Do NOT expose the battery to water.
- Do NOT expose the battery to fire & high temperature.
- Do NOT short circuit, crush, or disassemble.
- Only use LiFePO₄ charger.
- Store at 50% capacity, recharge every 3 months. The storage area should be clean, cool, dry and ventilated.