Lithium Iron Phosphate (LiFePO4) Battery

Features of LiFePO4 Battery

- Longer Cycle Life: Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.
- Lighter Weight: About 40% of the weight of a comparable lead acid battery. A 'drop in' replacement for lead acid batteries.
- **Higher Power**: Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.
- Wider Temperature Range: -20 C~60 C.
- Superior Safety: Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation.
- Increased Flexibility: Modular design enables deployment of up to four batteries in series and max ten batteries in parallel.



12.8V, 150AH/150A BMS

Application

- Electric vehicles,Boat,Caravan,
- electric mobility Solar/wind energy
- storage system UPS, backup power
- Telecommunication
- Medical equipment
- Lighting

Specification of battery pack

LiFePO4 Power offers 2-year warranty . It is the benefit of years of continuous engineering improvement and proven experience with all of our batteries in the harshest environment .Compared to conventional lead-acid batteries, This 12V 200Ah Lithium us more light in weight ,saving space and has has extremely efficient and high performance.

Our Deep Cycle 12V200LFP has 12 volts (12.8V) and a 200Ah capacity and is perfect for powering your deep cycle systems, this lithium battery a strong, safe and easy to use energy storage solution, This is a very safest Lithium technology available now, with our unique BMS and electronics further increase safety and durability.

Can be connected in parallel for increased capacity, and connected in series for increased voltage Max 48V.

ELECTRICAL SPECIFICATIONS

MECHANICAL SPECIFICATIONS

Nominal Voltage	12V	Terminal Type	2*M8 Bolts
Nominal Capacity	150Ah	Weight	16.5kg
Nominal Energy	1920Wh	Case Dimension(L*W*H)	480*170*240mm
Internal Resistance	≤30 @50% SOC	Case Type	ABS IP54
Capacity	@ 50A: 240minutes(4hours)	Cell type / Chemistry	Cylindrical-LiFePO4
Self Discharge	5% /per month	LCD or Bluetooth Function	Optional
Maximum In Series and Parallel	4pcs	BMS:low voltage,high voltage,over temperature,	
Maximum In Parallel	Unlimited	Over current,short-circuit protection .etc	

Discharge Current and Voltage Specifications

MAX Continuous Discharge Current	150A	
Peak Current	300A (10s)	
Discharge pulse current	600A±50A (31±10ms)	
BMS Low Voltge Cut-off	8V (2.0V±0.05v) pc)	
BMS Reconnect Voltage	8.8V (2.5V±0.05v) pc)	
Short Circuit Protection	200-800 μs Auto recover or charge release	

Charge Current and Voltage Specifications

Max Charge Current	150A	
Recommended Charge Current	5A - 50A	
End of Charge voltage	14.4V±0.2V	
End of discharge voltage	8V	
BMS Over Charge Voltage Cut-off	15V(3.75V±0.05v pc)	
Balancing Voltage	3.6V±0.05v pc	

COMPLIANCE SPECIFICATIONS

Temperature Ranges

Discharge Temperature	-20∼+65℃		CE for Battery Pack
Charge Temperature	-20∼+45℃	– Certifications	UN38.3 for Battery Pack
Storage Temperature Range	-20∼+45 ℃	_	UL1642 & IEC62133 & BIS for cells
BMS High Temperature Protection	90 °C	Shipping classification	UN 3480

Packing Pictures

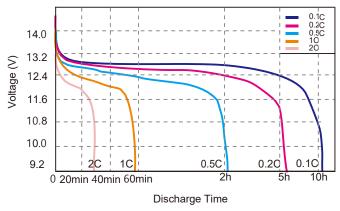
Battery High Temperature Protection 60°C



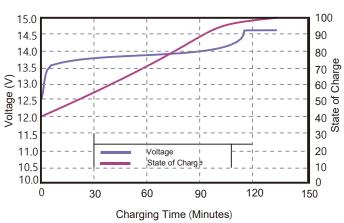


Different Rate Discharge Curve

Different Rate Discharge Curve @25°C

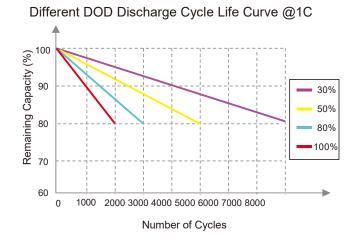


State of Charge Curve



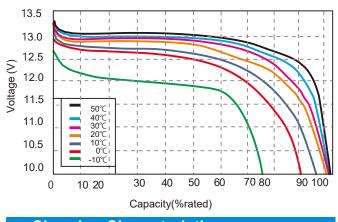
State of Charge Curve @0.5C 25℃

Cycle Life Curve



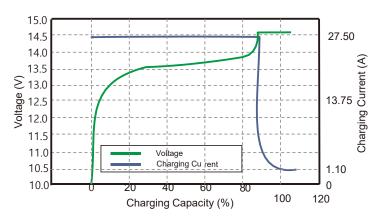
Different Temperature Discharge Curve

Different Temperature Discharge Curve @0.5C

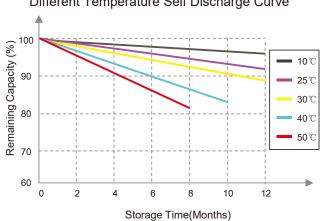


Charging Characteristics





Self Discharge Characteristics Curve



Different Temperature Self Discharge Curve



Bluetooth Interface :



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