

Shenzhen Leadyo Technology Co.,LTD

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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 20 batteries in parallel.





12.8V, 70Ah/70A BMS

Application

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

Specification of battery pack

Our Deep Cycle has 12 volts (12.8V) and a 70Ah 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	70Ah	Weight	10kg	
Nominal Energy	896Wh	Case Dimension(L*W*H)	10.2 x 6.6 x 8.2" 260 x 168 x 210 mm	
Internal Resistance	≤30 @50% SOC	Case Type	ABS IP56	
Capacity	@ 25A: 240minutes(4hours)	Cell type / Chemistry	Prismatic-LiFePO4 chemistry	
Self Discharge	5% /per month	Bluetooth		
Maximum In Series and Parallel	4pcs	BMS:low voltage,high voltage,over temperature,		
Maximum In Parallel	Recommended max 12pcs	Over current, short-circuit protection , Balancing .etc		



Discharge Current and Voltage Specifications

MAX Continuous Discharge Current	70A	
Peak Current	200A (10s)	
Discharge pulse current	300A±50A (31±10ms)	
BMS Low Voltge Cut-off	8.8V (2.2V±0.05v) pc)	
BMS Reconnect Voltage	10.8V (2.7V±0.05v) pc)	
Short Circuit Protection	200-800 µs Auto recover or charge release	

Charge Current and Voltage Specifications

Max Charge Current	70A	
Recommended Charge Current	5A - 50A	
End of Charge voltage	14.4V±0.2V	
BMS Over Charge Voltage Cut-off	15V(3.75V±0.05v pc)	
Balancing Voltage	3.6V±0.05v pc	
Cell Balancing current	116±10mA	

Temperature Ranges

COMPLIANCE SPECIFICATIONS

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
Battery High Temperature Protection	60℃	Shipping classification	UN 3480

Packing Pictures







PERFORMANCE CHARACTERISTICS

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

Charging Characteristics @0.5C 25℃



Self Discharge Characteristics Curve



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