Lithium Iron Phosphate (LiFePO4) Battery

12.8V100Ah Super Slim

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 the 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.

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 battery has 12 volts (12.8V) and 100Ah capacity perfect for powering your deep cycle systems, this lithium battery is a strong, safe, and easy-to-use energy storage solution. This is the very safest Lithium technology available now, with a unique BMS for increased safety and durability.
Can be connected in parallel for increased capacity, and connected in series for increased voltage Max 48V.

ELECTRICAL SPECIFICATIONS

Nominal Voltage	12.8V
Nominal Capacity	100Ah
Nominal Energy	1280Wh
Internal Resistance	≤30 @50% SOC
Capacity	@25A:240minutes
Self Discharge	5% /per month
Maximum In Series and Parallel	4pcs
Maximum In Parallel	Unlimited

MECHANICAL SPECIFICATIONS

Terminal Type	2*M8 Bolts
Weight	13kg
Case Dimension(L*W*H）	600*275*65mm(+/-0.3mm)
Case Type	Metal case
Cell type / Chemistry	LiFePO4

Discharge Current and Voltage Specifications

MAX Continuous Discharge Current	100A
Peak Current	250A (10s)
Discharge pulse current	400A±50A （31±10ms)
BMS Low Voltage 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	100A
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

Temperature Ranges

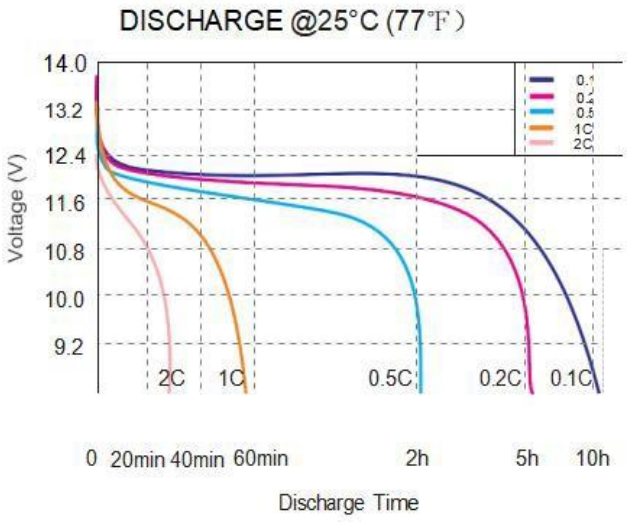
Discharge Temperature	-20～+65℃
Charge Temperature	-20～+45℃
Storage Temperature Range	-20～+45℃
BMS High Temperature Protection	90℃
Battery High Temperature Protection	60℃

COMPLIANCE SPECIFICATIONS

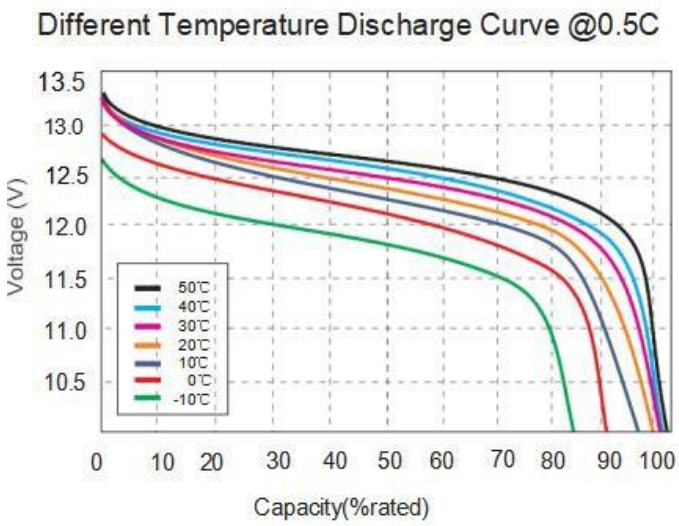
Certifications	CE for Battery Pack
	UN38.3 for Battery Pack
	UL1642 & IEC62619
Shipping classification	UN 3480

PERFORMANCE CHARACTERISTICS

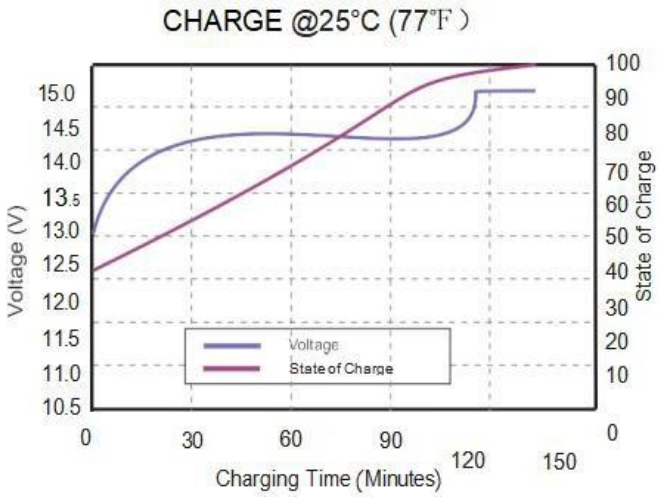
DISCHARGE VOLTGE CHARACTERISTICS AT VARIOUS



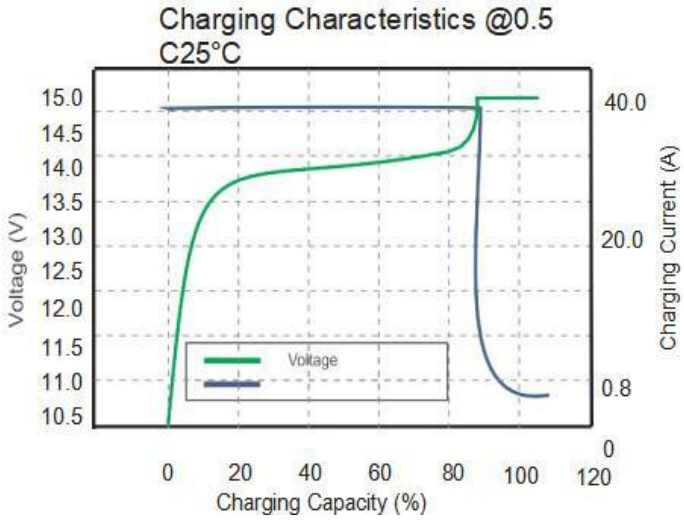
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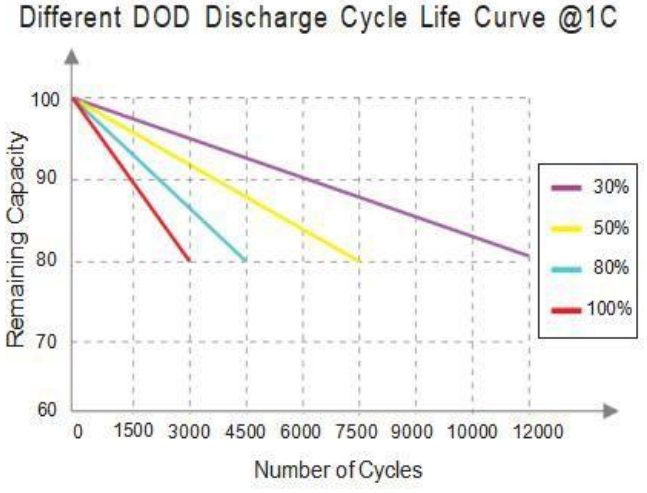
CHARGE VOLTGE CURVE AT VARIOUS RATES



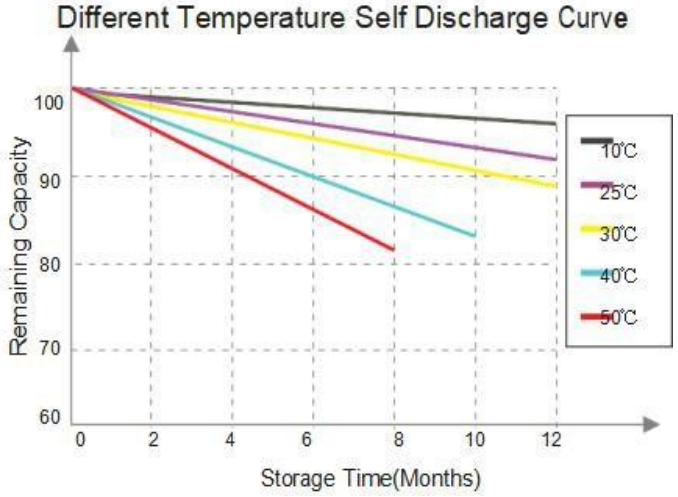
CHARGE VOLTGE CHARACTERISTICS AT VARIOUS



CYCLE LIFE AT DISCHARGE



SELF DISCHARGE CHARACTERISTICS CURVE



UN38.3 CE 12 Lithium