Shenzhen Leadyo Technology Co.,LTD
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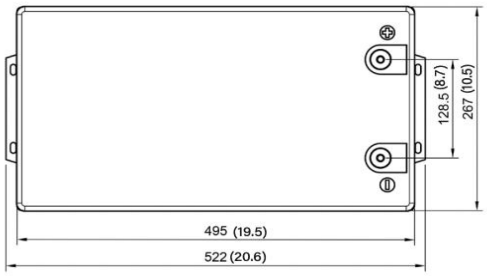
Lithium Iron Phosphate (LiFePO4) Battery

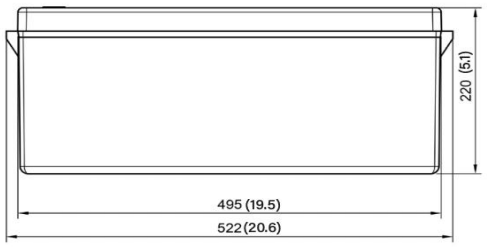
12.8V, 300Ah with Bluetooth

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.

DIMENSIONAL SPECIFICATIONS





Specification of battery pack

Electrical Characteristics	Nominal Voltage	12.8V
	Nominal Capacity	Minimum: 300Ah
	Energy	3840Wh
	Internal Resistance	≤30mΩ
	Cycle Life	>2000 cycles @1C 100%DOD; >3000 cycles @0.5C 80%DOD; (>5000 cycles @ 0.2C 80-100% DOD.
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.5C
	Efficiency of Discharge	96~99% @1C
Standard Charge	Charge Voltage	14.4±0.2V
	Charge Mode	CC/CV
	Recomm.Charge Current	10-50A
	Max. Charge Current	150A
	Charge Cut-off Voltage	14.6V
Standard Discharge	Continuous Current	150A
	Max. Pulse Current	700A /31ms
	Discharge Cut-off Voltage	10V
	Charge Temperature	0 ℃ to 45 ℃ (32F to 113F) @60±25% Relative Humidity
	Discharge Temperature	-20 ℃ to 60 ℃ (-4F to 140F) @60±25% Relative Humidity
	Storage Temperature	0 ℃ to 40 ℃ (32F to 104F) @60±25% Relative Humidity

Environmental	Plastic Case	ABS+PC
	Dimensions (in./mm.)	L520*W269*H220mm
	Weight (lbs./kg.)	31kg
	Terminal	M8
	Protocol (optional)	optional

Specification of BMS board

Voltage	Charging voltage	DC:14.4V 3.6V/Cell (CC/CV)
	Balance voltage for single cell	3.60±0.05V
Current	Balance current for single cell	116±10mA
	Current consumption	≤600μA
	Maximal continuous charging current	150A
	Maximal continuous Discharging current	150A
Over charge Protection	Over charge detection voltage	3.9±0.05V
	Over charge detection delay time	0.5S—2S
	Over charge release voltage	3.6±0.1V
Over discharge protection	Over discharge detection voltage	2.2±0.1V
	Over discharge detection delay time	10mS—400mS
	Over discharge release voltage	2.5±0.1V
Over current protection	Over current detection current	650±50A
	Detection delay time	5ms—60ms
	Release condition	Cut load,charge release
Short protection	Detection condition	Exterior short circuit
	Detection delay time	200-800us
	Release condition	Cut load,charge release
Resistance	Protection circuitry	≤50mΩ

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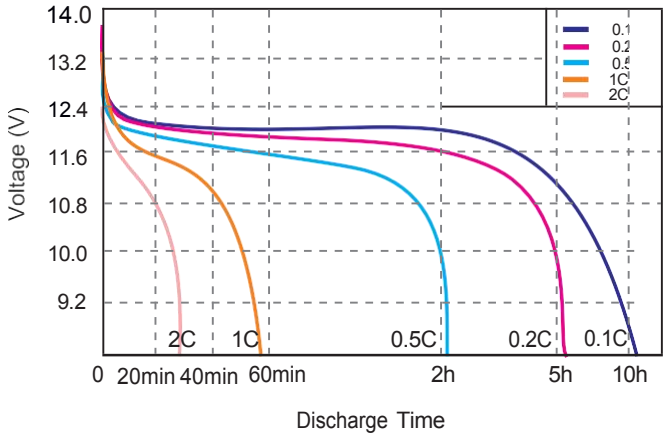
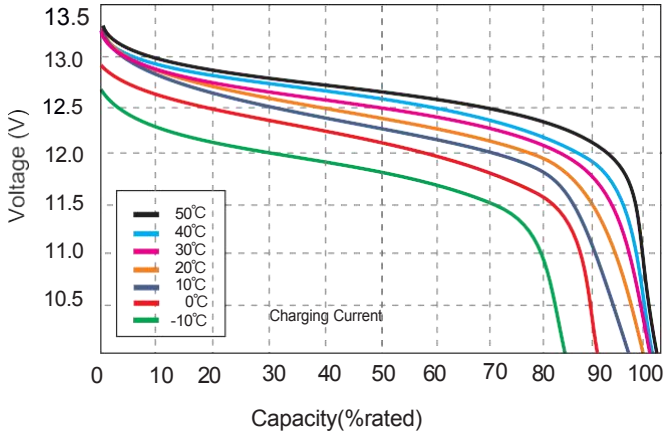
DISCHARGE VOLTGE CHARACTERISTICS AT VARIOUS RATES

DISCHARGE @25°C (77°F)



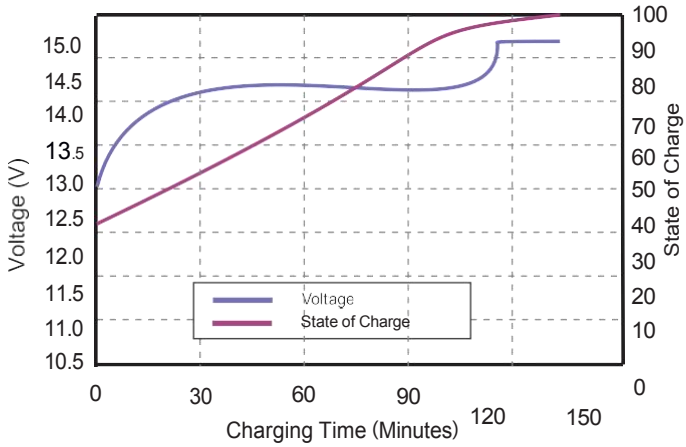
DISCHARGE VOLTGE CHARACTERISTICS AT VARIOUS TEMP

Different Temperature Discharge Curve @0.5C



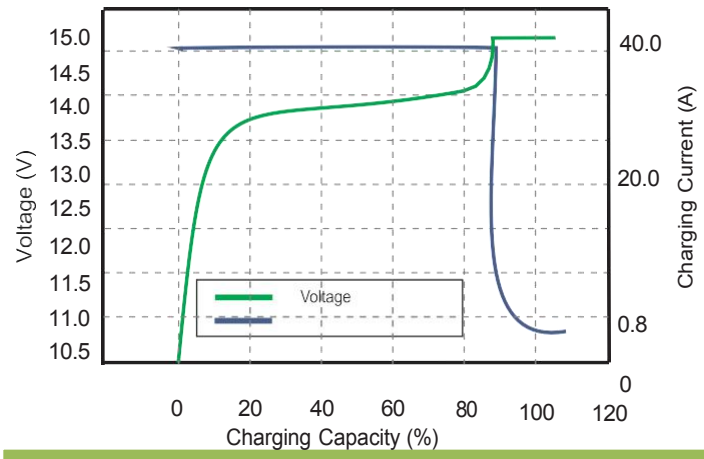
CHARGE VOLTGE CURVE AT VARIOUS RATES

CHARGE @25°C (77°F)



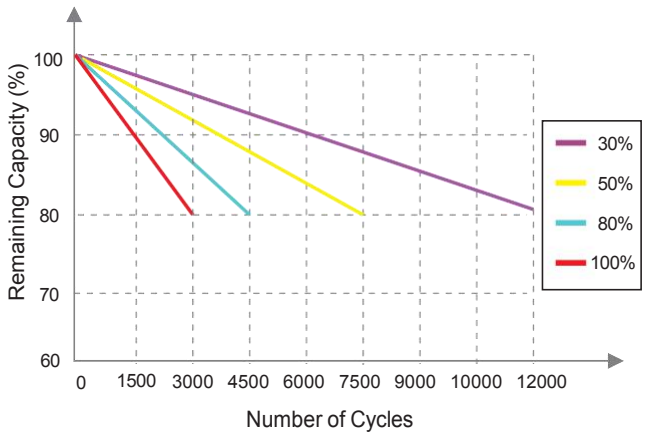
CHARGE VOLTGE CHARACTERISTICS AT VARIOUS RATES

Charging Characteristics @0.5 C25°C



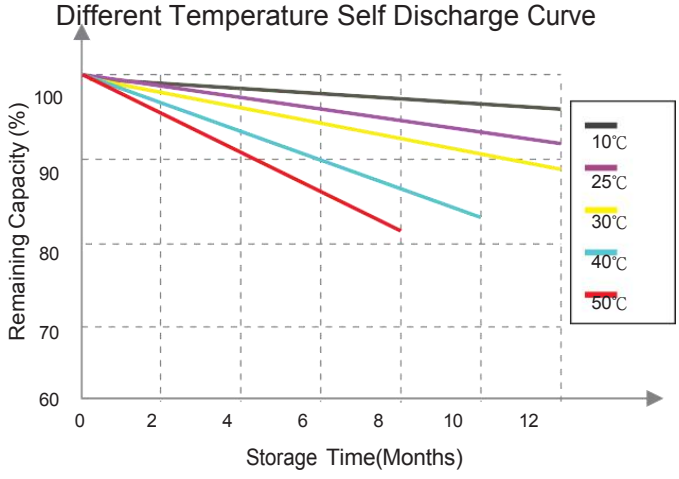
CYCLE LIFE AT DISCHARGE

Different DOD Discharge Cycle Life Curve @1C



SELF DISCHARGE CHARACTERISTICS CURVE

Different Temperature Self Discharge Curve



Voltage: 12.8V | Capacity: 300 Ah | Energy: 3840 Wh | Group: 8D

UN38.3 CE 12 Lithium