Probe
The Complete Power Package

Lithium Iron Phosphate (LiFePO4) Battery

MaxLi DEEP CYCLE

Features of LiFePO4 battery

Longer Cycle Life: Offers up to 20times 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 up to ten battery in parallel.

BMS Specification

- Overcharge detection function
- Over discharge detection function
- Over current detection function
- Temperature protection
- Short detection function
- Balance function

Battery Model: YS-48-100-W

Specification

Electrical Characteristics	Nominal Voltage	48.0V
	Nominal Capacity	100Ah
	Energy	4800Wh
	Internal Resistance	≤ 50mΩ
	Cycle Life	>2000cycles @1.0C 100%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100%@0. 2C
	Efficiency of Discharge	96~99%@0.5C
Standard Charge	Charge Voltage	54.8±0. 1V
	Charge Mode	0.2C to 57.6V,then 57.6V,charge current to0.02C(CC/CV)
	Charge Current	50A
	Max. Charge Current	80A
	Charge Cut-off Voltage	58.5V±0. 2
Standard Discharge	Continuous Current	80A
	Max continuous discharge current	100A
	Discharge Cut-off Voltage	37.5V
Environmental	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
	Water Dust Resistance	IP56
Mechanical	Cell & Method	32700 6Ah Cylindrical cells
	Shell material	Iron(SPCC)
	Dimensions (in./mm.)	650 x 438 x 178
	Weight (lbs./kg.)	Approx:55Kg
	Gravimetric specific energy	85WH/KG
	Protocol (optional)	RS485/RS232
	SOC (optional)	LED

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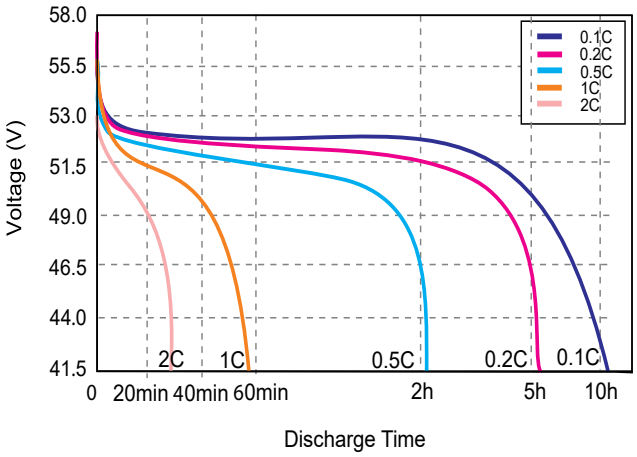
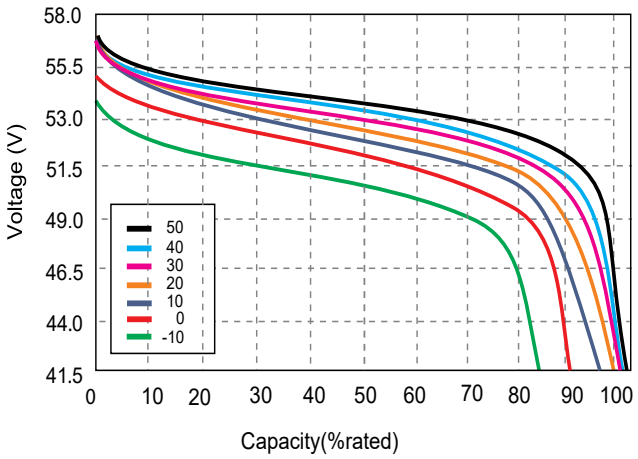
Different Rate Discharge Curve

Different Rate Discharge Curve @25°C



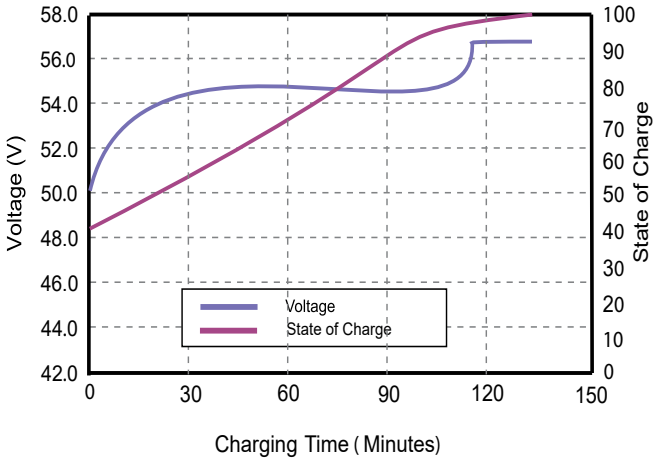
Different Temperature Discharge Curve

Different Temperature Discharge Curve @0.5C



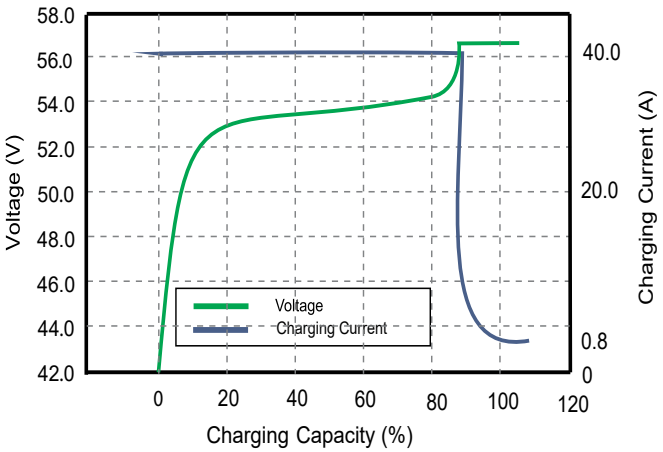
State of Charge Curve

State of Charge Curve @0.5C 25°C



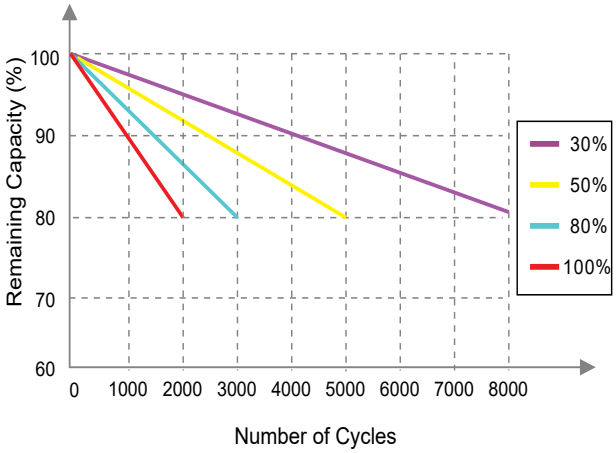
Charging Characteristics

Charging Characteristics @0.5C 25°C



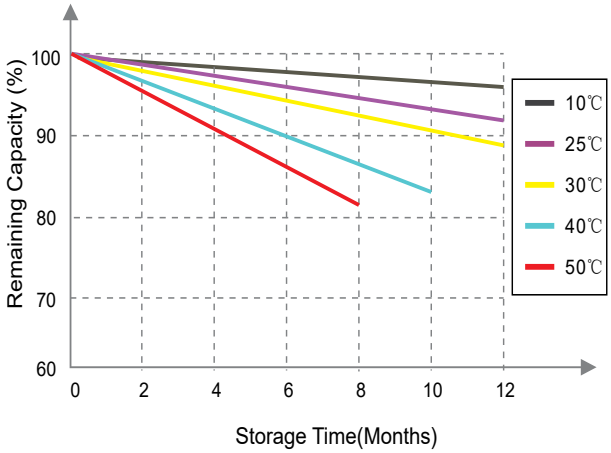
Cycle Life Curve

Different DOD Discharge Cycle Life Curve @1C



Self Discharge Characteristics Curve

Different Temperature Self Disharge Curve



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