



Lithium LiFePO₄ Battery

LFP48-100 48V 100Ah

LiFePO₄ Lithium Battery

Longer Cycle Life: 5 times longer cycle life than VRLA battery.

Light Weight: About 40% weight of VRLA battery

Quick Charge: Short charge time compared with VRLA battery.

Low Self-Discharge: Lower self-discharge compared with VRLA battery,

Superior Safety: Multi-protection methods built inside to protect the battery from overcharge, over discharge and short circuit situation.

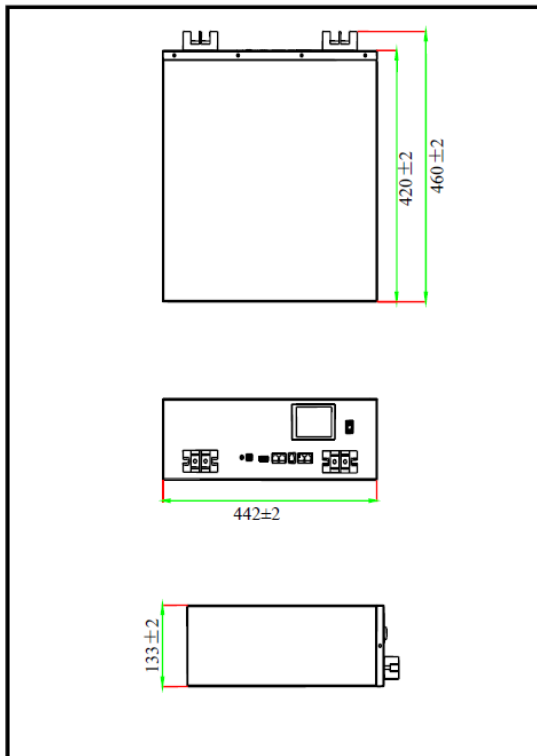
High Efficiency: Higher energy efficiency at 92% compared to VRLA battery at 80%.



● Specification

Nominal voltage		48V
Nominal capacity		100Ah
Dimension	Length	482mm
	Width	480mm
	Height	133mm
	Total height	133mm
Approx. weight		41kg

● Outer dimension (mm)

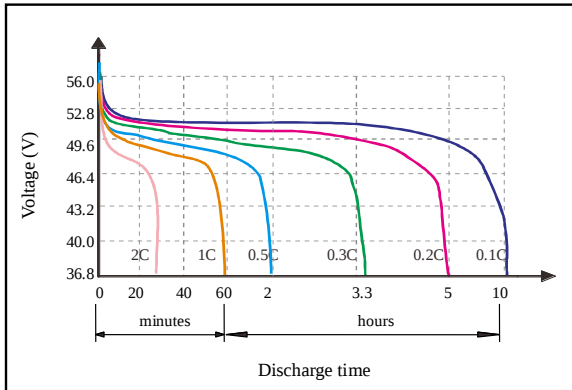


● Characteristic

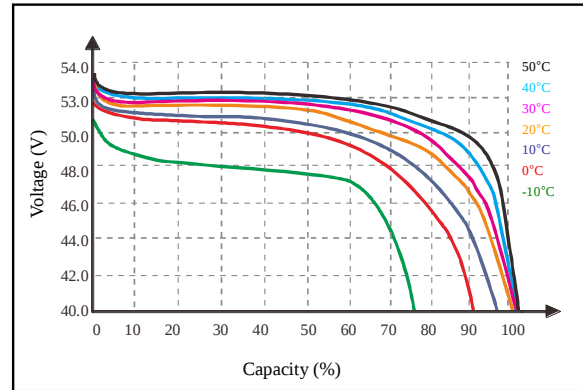
Electrical Parameters (25°C)	Rated Voltage	48V
	Rated Capacity (C ₅)	100Ah@25°C
	Energy	4800Wh
	1 Month Self Discharge	<3%
	Charge Efficiency	99.5%@ 0.2C
	Discharge Efficiency	96-99%@ 1C
Terminal Diameter		M10
Internal resistance (Fully charged, 25°C)		≤20mΩ
Cycle life		>4000 cycles @ 0.2C 100% DOD
Capacity affected by temperature	40°C	101%
	25°C	100%
	0°C	90%
	-10°C	75%
Nominal operating temperature		25°C± 3°C
Operating temperature range	Discharge	- 20°C~ 60°C
	Charge	0°C~ 45°C
	Storage	0°C~ 40°C
Water Dust Resistance		IP50
Charge Voltage		54.75V
Standard Charge Mode (25°C±2°C, <75%RH)		0.2CA Constant Current to 54.75V, then Constant Voltage 54.75V until the current drops to 0.02CA, before use, rest 30 minutes
Charge Current		20A
Maximum Charge Current		50A
Charge Cut off Voltage		54.75V
Continuous Discharge Current		100A
Maximum Pulse Current		200A (<500us)
Discharge Cut Off Voltage		42.18V
Communicate Protocol (optional)		RS485/RS232/CAN
SOC (optional)		Screen/LED/PC Software
Maximum battery connection		8 Parallel
Mechanical	Cells	15 Strings
	Container	Metal

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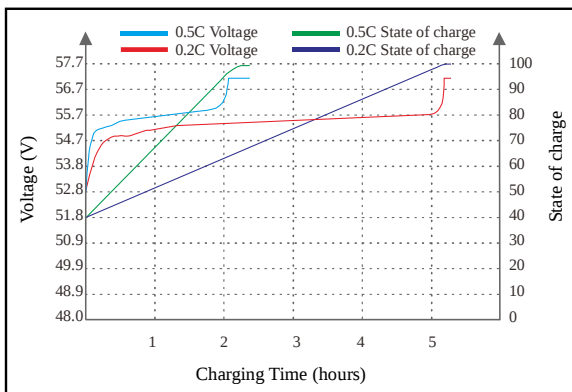
Discharge characteristics(25°C)



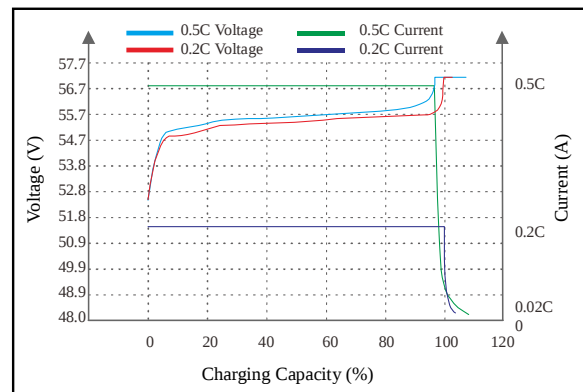
Temperature effects on discharge characteristics (0.5C)



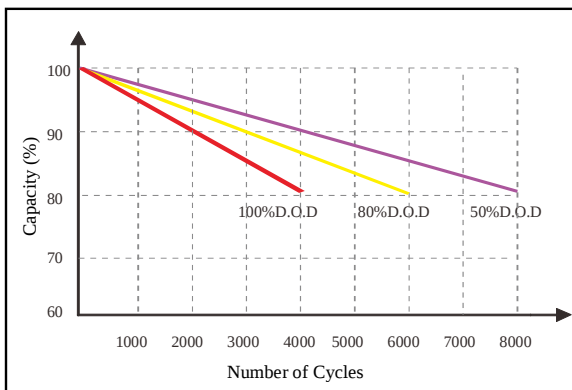
State of Charge Curve (25°C)



Charging characteristics



Cycle Life on DOD (25°C)



Self Discharge Characteristics Curve

