

ROBUSTE LITHIUM BATTERY LR48200

48V200AH-4U | 9.6 KWH



- More than 6000 cycles with 80% usable capacity |
- Compact design, suitable for your home environment |
- Modular design, customers can choose capacity matching |
- Compatible with most hybrid inverters on the market |
- Easy to install, Minimize installation costs and time |

PRODUCT INFORMATION

Robuste 48V200AH-4U is an ideal solution for residential storage applications, with standard 48V/200AH specification, up to 80% usable capacity and 5 years warranty*. The battery is one of the best-selling Lithium-ion batteries on the market globally. This Robuste 9.6kWh 48V200AH model can be used in many homes and businesses. It's reliable, affordable, slim and easy to install.

MAIN SPECIFICATIONS

BATTERY CELL SPECIFICATION			
Item	General Parameter		Remark
Rated Capacity	Typical	100 Ah	Standard Discharge (0.2 C ₅ A) after Standard Charge
	Minimum	100 Ah	
Nominal Voltage	3.2 V		Operation Voltage
Internal Impedance	≤ 0.65 mΩ		Internal resistance measured at AC 1 KHz after 50% charge. The measure uses the new batteries within one week after shipment and cycles less than 5 times
Dimension	Thickness	49.3 mm	Cell Dimensions
	Width	115.6 mm	
	Height	173.9 mm	
Weight	2 kg		±2%
Standard Charge	Constant Current	0.33 C ₅ A	Charging Time: 3.5h
	Constant Voltage	3.65 V	
	0.02 C ₅ A Cut-Off		
Rapid Charge	Constant Current	1 C ₅ A	Charging Time: 1.5 @ ≥ 10°C
	Constant Voltage	3.65 V	
	0.01 C ₅ A Cut-Off		
Standard Discharge	Constant Current	0.33 C ₅ A	Discharging Time: 3h
	End Voltage	2.5 V	
Maximum Discharge Current	Constant Current	2 C ₅ A	100 A @ ≥ 0°C
	End Voltage	2.5 V	
Volumetric Specific Energy	295 Wh/L		±2%
Gravimetric Specific Energy	139 Wh/Kg		±2%

BATTERY PACK SPECIFICATION			
Item	General Parameter		Remark
Combination Method	15S2P		-
Rated Capacity	Typical	200 Ah	Standard Discharge after Standard Charge (package)
	Minimum	196 Ah	
Factory Voltage	49.0 V - 51.0 V		Operation Voltage
Voltage at End of Discharge	42.0 V		Discharge Cut-Off Voltage
Charging Voltage	53.3 V		-
Internal Impedance	≤ 80 mΩ		Internal resistance measured at AC 1 KHz after 50% charge. The measure uses the new batteries within one week of shipment and cycles less than 5 times
Standard Charge	Constant Current	40 A	Charging Time: 6h
	Constant Voltage	54.75 V	
	0.02 C ₅ A Cut-Off		
Limiting Current	20 A		-
Standard Discharge	Constant Current	40 A	-
	End Voltage	42 V	
Maximum Continuous Charge Current	100 A		T≥10°C
Maximum Continuous Discharge Current	100 A		T≥10°C
Operation Temperature Range	Charge	0~45°C	60±25%R.H. Bare Cell
	Discharge	-20~55°C	
Storage Temperature Range	Less than 12 months	-10~35°C	60±25% R.H. at the shipment state
	Less than 3 months	-10~45°C	
	Less than 7 days:	-20~65°C	
Dimensions	442 x 680 x 177 mm		Including Case
Weight	95 Kg		±2% Including Case

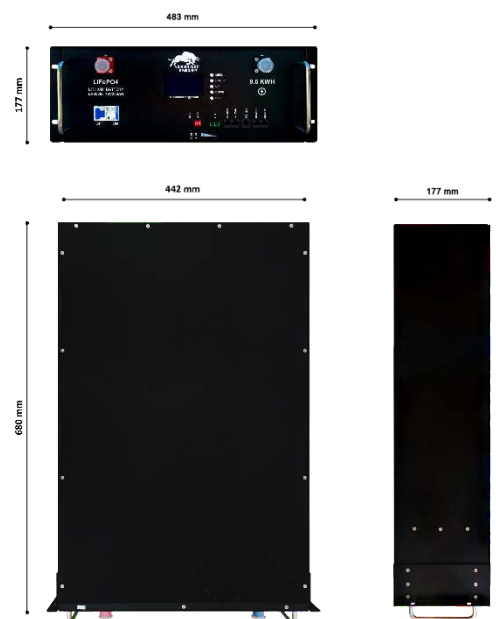
BATTERY MANAGEMENT SYSTEM

The BMS is designed for 15/16 series lithium batteries.

The BMS has the following functions:

- Overcharge protection
- Over discharge protection
- Over current protection
- Short circuit protection
- Temperature detection
- Over temperature protection
- Current balance function
- Communication function
- Alarm function
- SOC detection function
- Storage of battery usage history

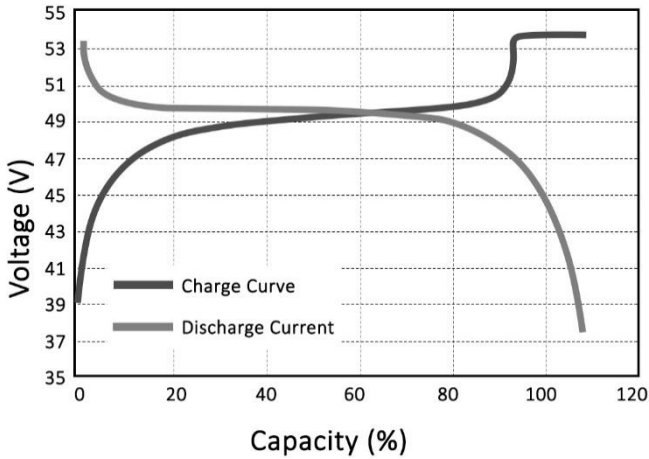
BATTERY DIMENSIONS



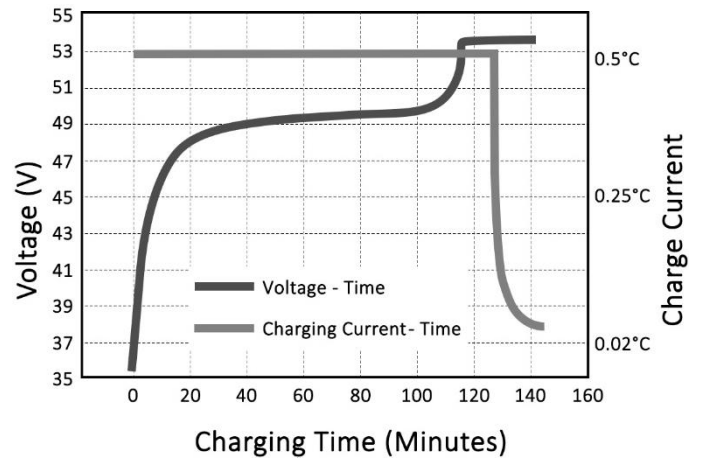


CHARGE AND DISCHARGE CURVES

CHARGE AND DISCHARGE CURVE @ 0.5C 25°C

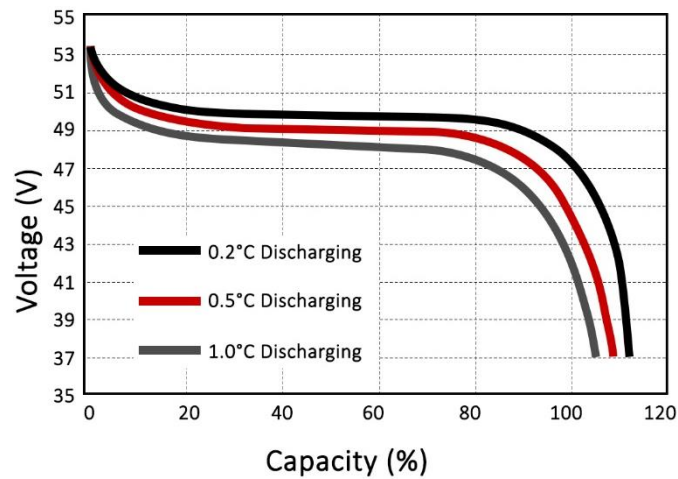


CHARGING CHARACTERISTICS @ 0.5C 25°C

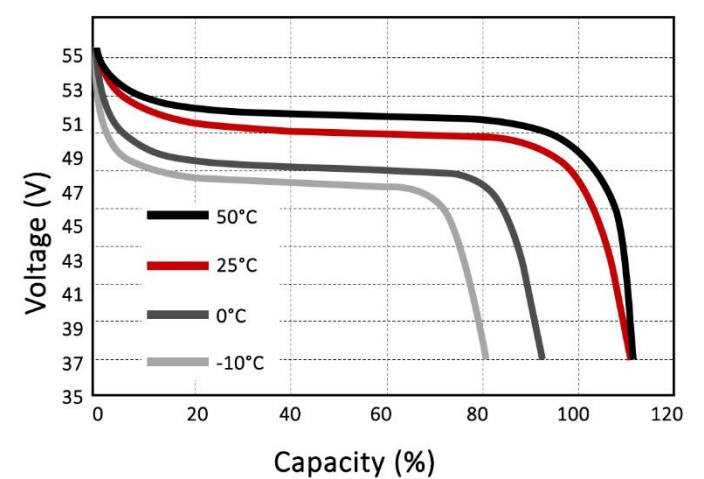


DIFFERENT CURRENT / TEMPERATURE DISCHARGE CURVES

DIFFERENT RATE DISCHARGE CURVE @ 25°C

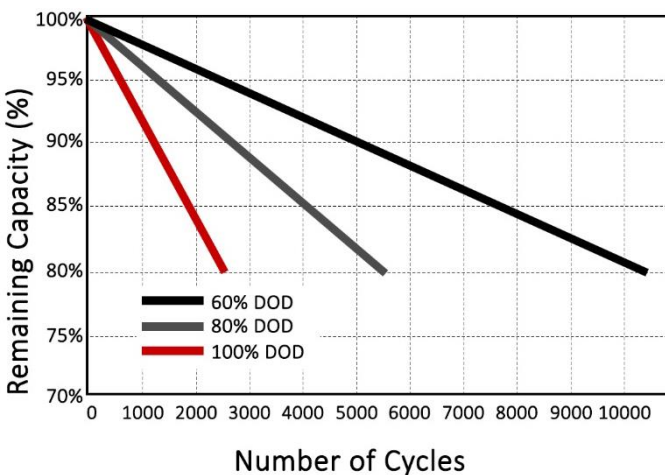


DIFFERENT TEMPERATURE DISCHARGE CURVE @ 0.5C



CYCLE LIFE CURVES

DIFFERENT DISCHARGE DEPTH LIFE CURVES @ 25°C 0.5C



DIFFERENT DISCHARGE DEPTH LIFE CURVES @ 40°C 0.5C

