

Technical Catalog

51.2V 200Ah (10.24kWh)
LiFePO₄ Battery



..Happiness

51.2V 200AH (10.24KWH) LIFEP04 BATTERY



Performance Specifications

General Information

Nominal Voltage	51.2 Vdc
Nominal Capacity	200 Ah
Nominal Energy	10240 Wh
Battery Chemistry	3.2V LiFePO ₄
Cell Connectivity	16S2P
Efficiency (Round Trip)	≥98%
Self-Discharge Rate	<3% Monthly
Max. In Parallel	16 Pcs
Max. In Series	Not Allowed
Cycle Life	6500 Cycles
	<i>0.2C, 25°C @ 80% DoD</i>
Origin	Shenzhen, China
BMS Build-in	Yes



Operating Parameters

Operating Voltage Range	44.8V-57.6V
Discharge Cut-Off Voltage	40V
Max. Discharge Current	100A
Peak Discharge Current	150A (3s)
Max. Charge Voltage	58.4V
Standard Charge	40A (0.2C)

Environmental Specifications

Discharge Temperature	-20°C ~ 55°C
Charge Temperature	0°C ~ 55°C
Storage Temperature	-10°C ~ 30°C
Ingress Rating	IP52

Mechanical Specifications

Dimensions (L*W*H)	680*412*231 mm
Weight	80 Kg
Mounting Options	Wall
Indicator State	ALM/RUN/SoC

Others

Screen	Touchable LED
Terminals	Magnetic Plug-In
Case Material	SPCC Steel
Bracket	Yes
Heating	Optional
Bluetooth(App)	Optional

BMS Protection Characteristics

Primary Charging	Current :105A	Delay Time: 20s
Second Charging	Current :110A	Delay Time: 2~3s
Primary Discharging	Current :110A	Delay Time: 10s
Second Discharging	Current :150A	Delay Time:100ms
Over-Charge Voltage	Voltage :58.4V	Delay Time: 1~2s
Over-Discharge Voltage	Voltage :40V	Delay Time: 1~2s
Temperature	PCB Temperature ≥ 95°C	
	Recover ≤ 85°C	
Communication Port	RS485,Optional For CAN/Dry Contact	



Constant Current Discharge Data (Amperes @ 25°C)

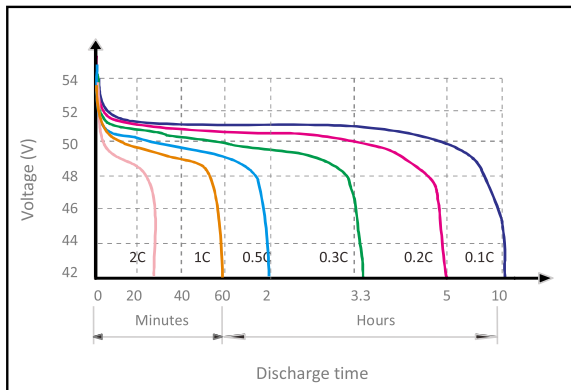
Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut-Off Voltage (40V)	---	100A	66.6A	50A	40A	20A	10A

Constant Power Discharge Data (Watts @ 25°C)

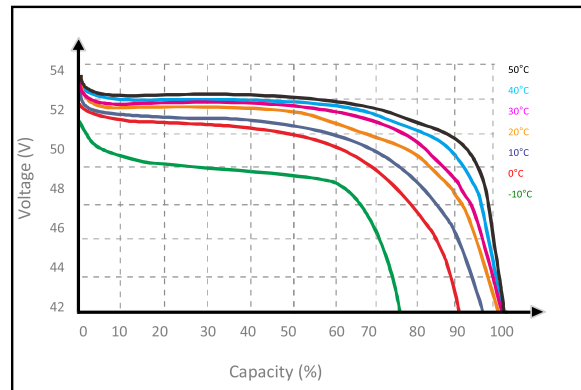
Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut-Off Voltage (40V)	---	5120W	3413.3W	2560W	2048W	1024W	512W

Testing Report Curve

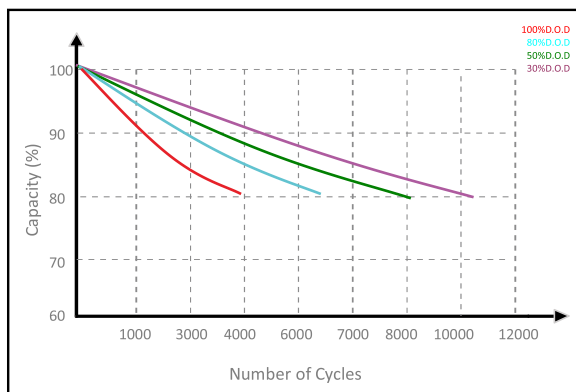
Discharge Characteristics (25°C)



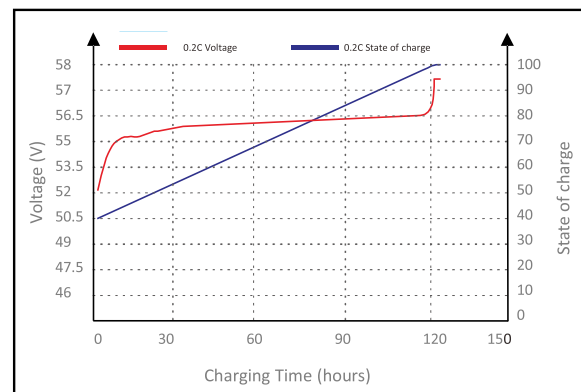
Temperature VS Discharge (0.2C)



DoD VS Cycle Life (0.2C 25°C)



State of Charge (0.2C, 25°C)



Note 1. The recommended storage temperature is 20°C to 30°C, battery life would be reduced if stored at high temperature (The recharging interval should be 12 months under the condition of storage temperature < 30°C, and 8 months under the condition of 30°C < storage temperature < 40°C).

Note 2. Affected by the external environment factors, such as temperature and duration of transportation and storage, the rated capacity may fluctuate by ±5%.

