

51.2V 60Ah GC

LiFePO4 Battery

Part Number: L51.2V60-120-GC-64-A200



Basic Specification

Nominal Voltage	51.2V
Nominal Capacity	60Ah
Nominal Energy	3072Wh
Internal Resistance	≤40mΩ
Max. Continuous Output Power	6144W
BMS Board	120A
Max. Batteries in Series and Parallel	4P1S
System Max. Continuous Power	24576W
System Max. Energy	12288Wh

Mechanical Specification

Dimension(L * W * H)	L20.55*W9.33*H8.58inch 522*237*218mm
Weight	Approx. 56.97 lbs/25.84kg
Terminal Type	M8*16mm
Terminal Torque	12 to 14 N·m
Case Material	ABS
IP Rating	IP65
Cell Type-chemistry	LiFePO4
UN Box Dimensions	595*315*300mm

Charge Specification

Max. Continuous Charging Current	60A(1C)
Recommended Charging Current	12A(0.2C)
Recommended Charging Voltage	57.6±0.8V

Safety Specification

Certifications	FCC,CE,RoHS,UN38.3,UL-2271
Protection	Over-temperature/Over-discharge/ Over-current/Over-voltage/Short-circuit/Low-temperature

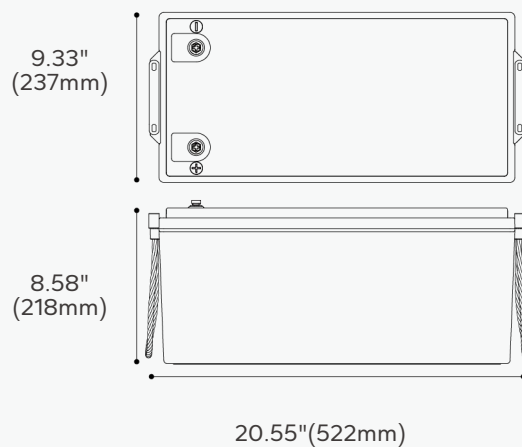
Discharge Specification

Max. Continuous Discharging Current	120A(2C)
Peak Discharging Current	350A(5.83C)

Environment Specification

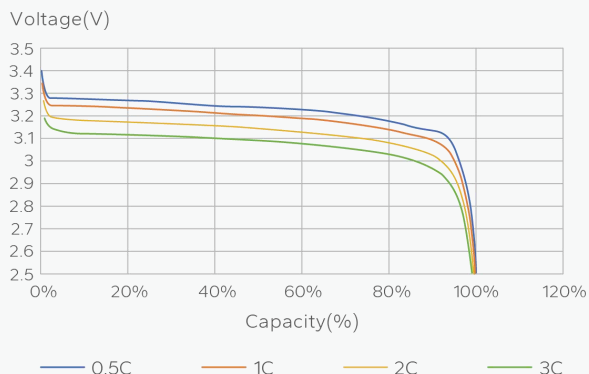
Storage Temperature Range	-10°C - 50°C (14°F - 122°F)
Recommended Storage Temperature	10°C - 35°C (50°F - 95°F)
Charging Temperature Range	0°C - 50°C (32°F - 122°F)
Discharging Temperature Range	-20°C - 60°C (-4°F - 140°F)

Dimensions

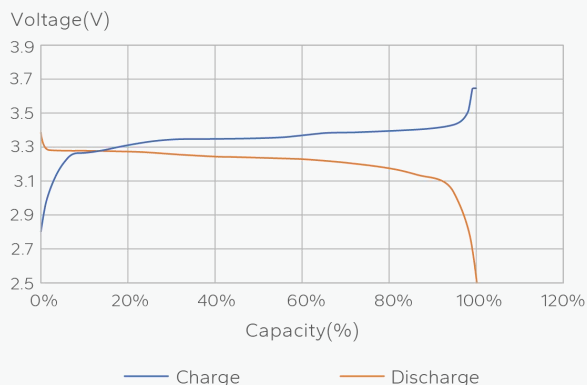


Performance Curves

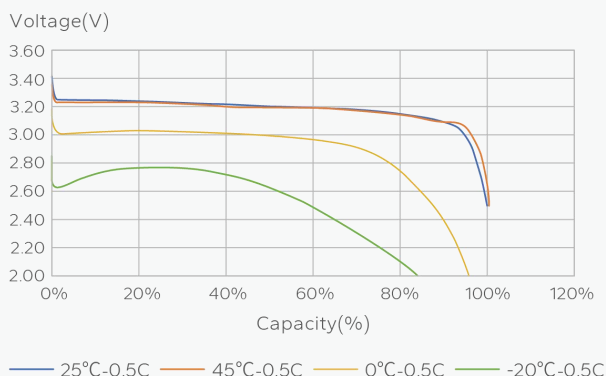
Discharge Performance at 25°C



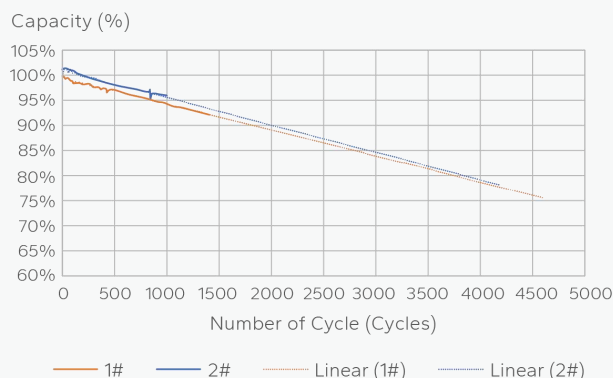
Charge and Discharge at 25°C, 0.5C



Discharge Curves at Different Temperature



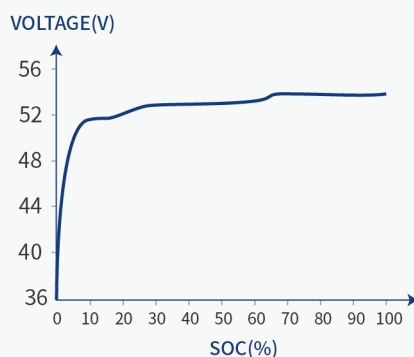
Cycle Life with DOD at 25°C



How to Estimate the Battery Capacity

The battery capacity could be roughly estimated by its **resting voltage** (not charging/discharging voltage). Since the voltage of each battery is slightly different, and the voltage measurement is affected by the measuring instrument, ambient temperature, etc., the following parameters are for reference only.

Resting Voltage: The voltage is measured after the battery has been disconnected from the charger and loads with zero current, and left alone for 30 minutes.



SOC (%)	VOLTAGE (V)
0	40 to 48
25	52 to 52.6
50	52.6 to 52.8
75	53.2 to 53.32
100	≥53.32

① Based on the characteristics of LiFePO4 batteries, the voltage measured by all LiFePO4 batteries during charging/discharging is not the real voltage of the battery. Therefore, after charging/discharging and disconnecting the battery from the power source, the voltage of the battery will gradually drop/increase to its real voltage.