

Specification GS48V 100Ah

Version Number: G-1

Product Specification

Pack Model: GS48100

Voltage: 51.2V

Capacity: 100ah

Prepared by	Checked by
Wa Yang	Sara Shi
2022-3-3	2022-4-7

Customer Approval		
Dept.	Signature	Date

Specification GS48V 100Ah

Version Number: G-1

1. Scope

This specification describes the property indexes and technical requirements of the 48V 100Ah rechargeable Lifepo4 lithium ion battery manufactured by GSOK Power Ltd (hereinafter to be referred as **GS BATTERY**).

2. Production

2.1 Product Name: Lifepo4 Lithium Ion Battery Pack

2.2 Specification: GS48V100Ah

3. Nominal Technique Parameters

Battery Pack				
Nominal Capacity	100Ah			
Nominal Voltage	51.2V			
Cell Type	Gotion-tech Grade A Prismatic cell			
Energy	5.12KWh			
Charge Voltage	58.4V			
Charge Cut-off Voltage	59.2V			
Discharge	40V			
Cut-off Voltage				
Charge Method	CC/CV			
Max Charge Current	100A			
Max Discharge Current	100A			
Communication Protocol	RS232/RS485/CAN support communication with inverters.			
Breaker	125A			
Parallel function	Support 16pcs in parallel			
Cycle Life	10000cycles			
Internal Impedance	≤30mΩ			

Specification GS48V 100Ah

Version Number: G-1

Dimension	420*480*200mm		
Weight	About 43KGS		
Working Temperature			
Charge Temperature		0°C to 45 °C	
Discharge Temperature		-20°C to 70 °C	
Storage Temperature		-40°C to 25°C, < 1 year	
		-40°C to 40°C, < 3 months	



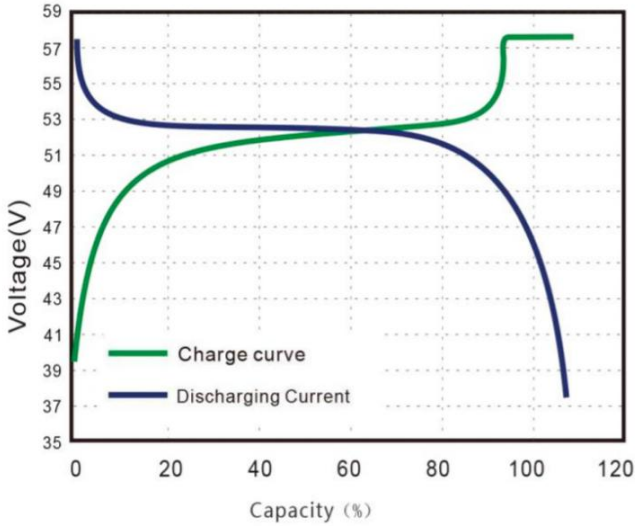
4. Main typical profiles of Lifepo4 battery

Specification GS48V 100Ah

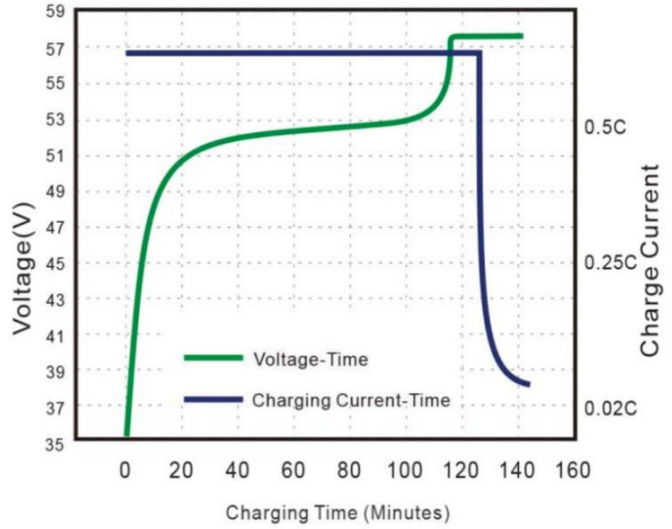
Version Number: G-1

Charging and Discharge curve

● Charge and discharge curve @0.5C 25°C

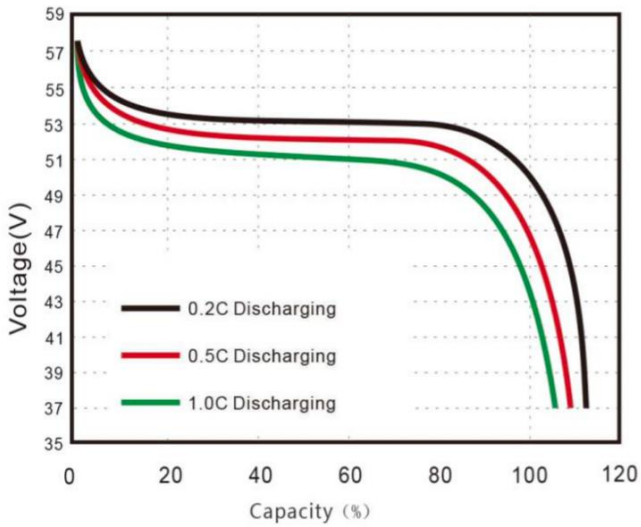


● Charging Characteristics @0.5C 25°C

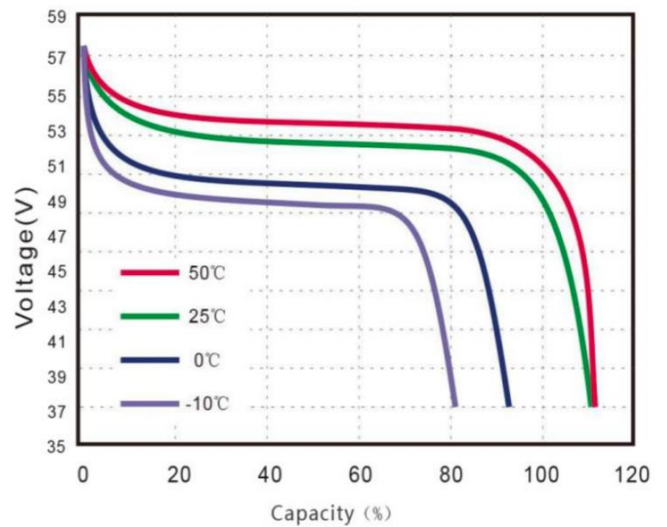


Different current/Temperature Discharge curves

● Different Rate Discharge Curve @25°C



● Different Temperature Discharge Curve @0.5C

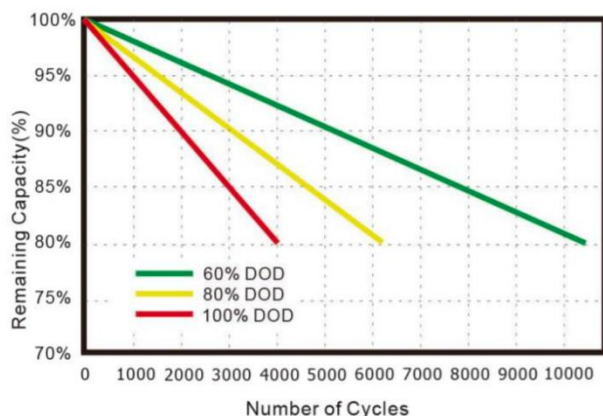


Specification GS48V 100Ah

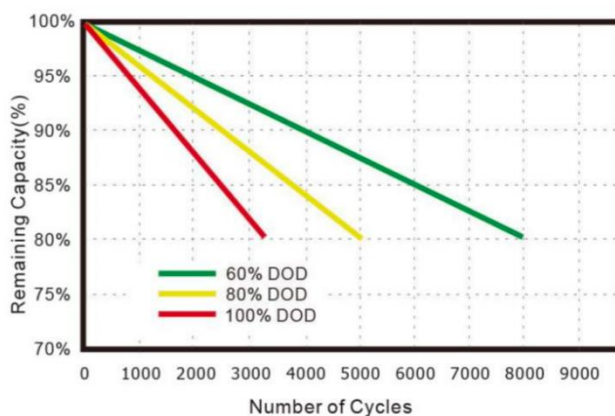
Version Number: G-1

Cycle Life Curve

● Different discharge depth life curves & 25°C 0.5C



● Different discharge depth life curves & 40°C 0.5C



5. Cautions in use

To ensure proper use of the battery please read the manual carefully before using it.

. Handling

- Do not expose to, dispose of the battery in fire.
- Do not put the battery in a charger or equipment with wrong terminals connected.
- Avoid shorting the battery
- Avoid excessive physical shock or vibration.
- Do not disassemble or deform the battery.
- Do not immerse in water.
- Do not use the battery mixed with other different make, type, or model batteries.
- Keep out of the reach of children.

. Charge and discharge

- Battery must be charged in appropriate charger only.
- Never use a modified or damaged charger.
- Do not leave battery in charger over 24 hours.

. Storage

- Store the battery in a cool, dry and well-ventilated area.

. Disposal

- Regulations vary for different countries. Dispose of in accordance with local regulations.

5 .Battery operation instruction

Specification GS48V 100Ah

Version Number: G-1

5.1 Charging

Charging current: Cannot surpass the biggest charging current which in this specification book stipulated.

Charging voltage: Does not have to surpass the highest amount which in this specification book stipulated to decide the voltage.

Charge temperature: The battery must carry on the charge in the ambient temperature scope which this specification book stipulated.

Using the constant electric current and the constant voltage way charge, the prohibition reverse charges. If the battery positive electrode and the cathode meet instead, can damage the battery.

5.2 Discharging current

The discharging current does not have to surpass this specification book stipulation the biggest discharging current, the oversized electric current electric discharge can cause the battery capacity play to reduce and to cause the battery heat.

5.3 Electric discharge temperature

The battery discharge must carry on in the ambient temperature scope which this specification book stipulated.

5.4 Over-discharges

After the short time excessively discharges charges immediately cannot affect the use, but the long time excessively discharges can cause the battery the performance, battery function losing. The battery long-term has not used, has the possibility to be able to be at because of its automatic flash over characteristic certain excessively discharges the condition, for prevented excessively discharges the occurrence, the battery should maintain the certain electric quantity.

5.5 Storing the Batteries

The battery should store in the product specification book stipulation temperature range. If has surpasses above for 3 months the long time storage, suggested you should carry on additional charge to the battery.

6. Period of Warranty

The period of warranty is 10 years from the date of shipment. GS Power Ltd guarantees to ten a replacement in case of cells with defects proven due to manufacturing process instead of the customer abuse and misuse.

Specification GS48V 100Ah

Version Number: G-1

7. Other the Chemical Reaction

Because batteries utilize a chemical reaction, battery performance will deteriorate over time even if stored for a long period of time without being used. In addition, if the various usage conditions such as charge, discharge, ambient temperature, etc. are not maintained within the specified ranges the life expectancy of the battery may be shortened or the device in which the battery is used may be damaged by electrolyte leakage. If the batteries cannot maintain a charge for long periods of time, even when they are charged correctly, this may indicate it is time to change the battery.

GSOK Power Ltd

www.gsokpower.com

monica@gsokpower.com

Tel&Whats app: +86 157 0118 6332