



## LITHIUM IRON PHOSPHATE BATTERY Rack System Module Battery



UN38.3  
PASSED



### Introduction

The GBLR series LiFePO4 battery designed with 15 years or more service life for general purpose, which designed with advanced technology, built in intelligent BMS for more safe, with SOC design and communication protocol to match up with different brand inverters.

### Applications

- ◆ Power Generation System (Solar and Wind Power System, etc.)
- ◆ Household Energy Storage System
- ◆ Auto Control System & ATM Machine
- ◆ Electronic Apparatus and Equipment
- ◆ Emergency Light & Emergency Backup
- ◆ Power Supply & Alarm / Security System
- ◆ Communication Power & DC Power
- ◆ Electric Power System (EPS)
- ◆ Uninterruptable Power System (UPS)
- ◆ .....

### Dimensions



### Technical Parameter

Battery Model	GBLR-48-100	Dimension	470(L)*440(W)*177(H)mm
Cell Model	IFpP50160118-100P3	Weight	Approx44.0kg
Nominal Voltage	48.0V	Battery Cell Connection	15S1P
Nominal Capacity	100Ah(4.8KWh)	IP Protection Level	IP20
Charge cut-off voltage	54.75V	Charging Method	CC/CV
Discharge cut-off voltage	42.0V	Charging Temperature Range	0°C~45°C
Maximum Charging Current	100A	Discharging Temperature Range	-20°C~60°C
Maximum Discharging Current	100A	Storage Temperature	-10°C~45°C
Load Power	≤4800W	Self Discharge Rate	≤2% per month @25°C
Internal Impedance	≤30mΩ	Number of Cycles	≥6000 cycles at 80% DOD
Open Voltage	48.0V~49.5V	Adopted Standard	IEC62619 designation

### Charge Performance

Recommended Charge Current	20A
Maximum Charge Current	100A@25°C
Peak Charge Current	130A (1S)@25°C
Recommended Charge Voltage	53.25V
BMS Charge Cut-Off Voltage	<54.75V (3.65V/Cell)
Reconnect Voltage	>50.7V (3.38V/Cell)
Balancing Voltage	<51.0V (3.4V/Cell)
Balancing Current	200mA

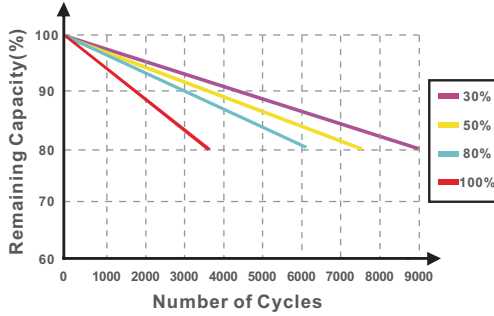
### Discharge Performance

Recommended Discharge Current	20A
Maximum Continuous Discharge Current	100A@25°C
Peak Discharge Current	130A (5s)@25°C
BMS Discharge Cut-Off Current	150A (500ms)
Recommended Low Voltage Disconnect	42.0V (2.8V/Cell)
BMS Discharge Cut-Off Voltage	40.5V (2.7V/Cell)
Reconnect Voltage	>43.5V (2.9V/Cell)
Short Circuit Protection	200~800us

## Characteristics Curve

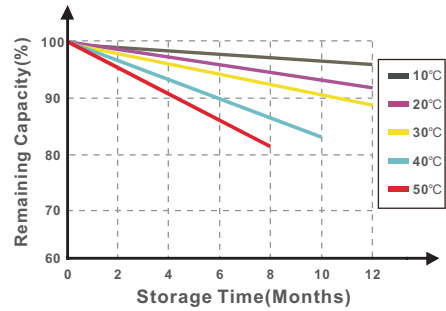
### Cycle Life Curve

Different DOD Discharge Cycle Life Curve @25°C



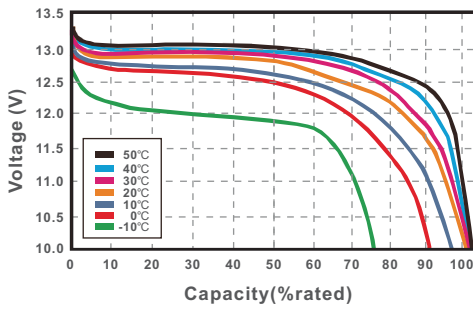
### Self Discharge Characteristics Curve

Different Temperature Self Discharge Curve



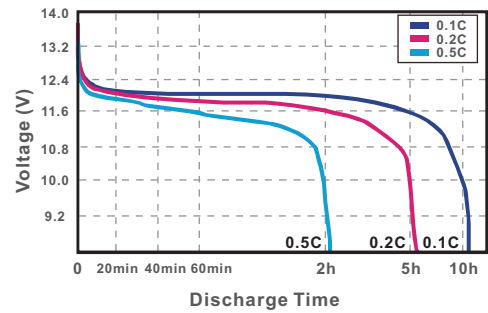
### Different Temperature Discharge Curve

Different Temperature Discharge Curve @0.5C



### Different Rate Discharge Curve

Different Rate Discharge Curve @25°C



## Features



Grade A Cells

6000

More Than 6000 Cycles  
@ DOD 80%



LED Screen For Real  
Time Monitoring



With State of Charge



Support high  
power discharge



Parallel connection: 15pcs  
max., 6-8PCS suggested.

