



UN38.3



LiFePO4

LITHIUM IRON PHOSPHATE BATTERY (LiFePO4 Battery Pack)

Introduction

The GBL series LiFePO4 battery is designed to have an extended service life of up to 15 years or even longer for normal use. It is manufactured using advanced technologies and features an integrated BMS 4.0 smart system and a Bluetooth app (optional) for smart monitoring.

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	GBL-12-100BV2	Dimension	330(L)*172(W)*215(H)mm
Nominal Voltage	12.8V	Weight	Approx 12.0kg
Nominal Capacity	100Ah(1280Wh)	Battery Cell Connection	4S1P
Charge cut-off voltage	14.6V	Charging Temperature Range	0°C~45°C
Discharge cut-off voltage	10.0V	Discharging Temperature Range	-20°C~60°C
Maximum Charging Current	100A	Storage Temperature	0°C~25°C(Recommended)
Maximum Discharging Current	100A	Self Discharge Rate	≤2% per month @25°C
Load Power	≤1280W	Number of Cycles	≥6000 cycles at 80% DOD
Internal Impedance	≤20mΩ	IP Protection Level	IP65
Open Voltage	12.8V~13.2V	Battery Pack Connection	Max. 4 Series and 4 Parallel
Charging Method	CC/CV	Adopted Standard	IEC62619 designation

Charge Performance

Recommended Charge Current	20A
Maximum Charge Current	100A@25°C
Peak Charge Current	200A (1S)@25°C
Recommended Charge Voltage	14.4V
BMS Charge Cut-Off Voltage	<15.0V (3.75V/Cell)
Reconnect Voltage	>14.4V (3.6V/Cell)
Balancing Voltage	13.2V (3.3V/Cell)
Balancing Current	200mA

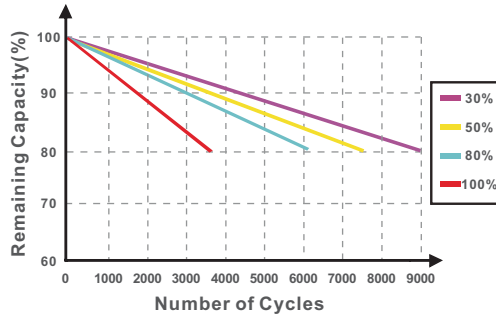
Discharge Performance

Recommended Discharge Current	20A
Maximum Continuous Discharge Current	100A@25°C
Peak Discharge Current	200A (5s)@25°C
BMS Discharge Cut-Off Current	330A (300ms)
Recommended Low Voltage Disconnect	10V (2.5V/Cell)
BMS Discharge Cut-Off Voltage	8.8V (2.2V/Cell)
Reconnect Voltage	>10.4V (2.6V/Cell)
Short Circuit Protection	1350±300A

Characteristics Curve

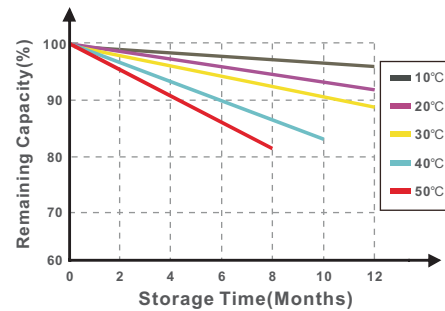
Cycle Life Curve

Different DOD Discharge Cycle Life Curve @25°C



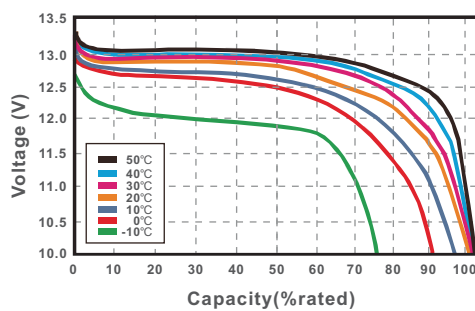
Self Discharge Characteristics Curve

Different Temperature Self Discharge Curve



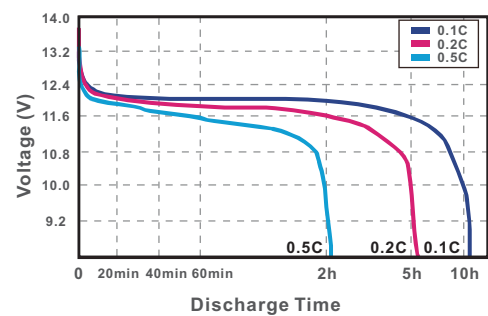
Different Temperature Discharge Curve

Different Temperature Discharge Curve @0.5C



Different Rate Discharge Curve

Different Rate Discharge Curve @25°C



Features

