



12-20V2

20Ah
12.8V

LiFePO4



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-12-20V2	Dimension	165(L)*126(W)*175(H)mm
Nominal Voltage	12.8V	Weight	Approx 2.0g
Nominal Capacity	20Ah(256Wh)	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	20A	Storage Temperature	0°C~25°C(Recommended)
Maximum Discharging Current	20A	Self Discharge Rate	≤2% per month @25°C
Load Power	≤256W	Number of Cycles	≥2000 cycles at 80% DOD
Internal Impedance	≤120mΩ	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	4A
Maximum Charge Current	20A@25°C
Peak Charge Current	30A (500ms)@25°C
Recommended Charge Voltage	14.4V
BMS Charge Cut-Off Voltage	<14.6V (3.65V/Cell)
Reconnect Voltage	>14.2V (3.55V/Cell)
Balancing Voltage	14.1V (3.525V/Cell)
Balancing Current	30-60mA

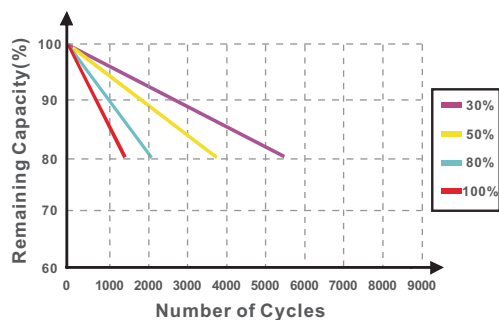
Discharge Performance

Recommended Discharge Current	4A
Maximum Continuous Discharge Current	20A@25°C
Peak Discharge Current	40A (5s)@25°C
BMS Discharge Cut-Off Current	30A (100ms)
Recommended Low Voltage Disconnect	10V (2.5V/Cell)
BMS Discharge Cut-Off Voltage	8.8V (2.2V/Cell)
Reconnect Voltage	>9.6V (2.4V/Cell)
Short Circuit Protection	800±50A

Characteristics Curve

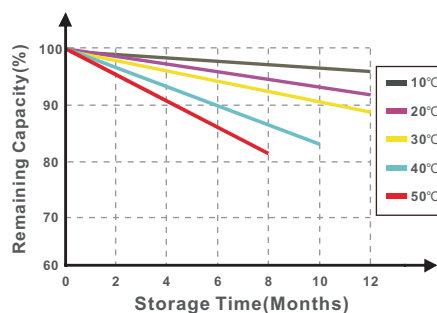
Cycle Life Curve

Different DOD Discharge Cycle Life Curve @25°C



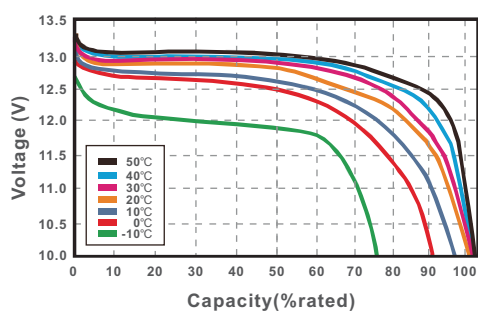
Self Discharge Characteristics Curve

Different Temperature Self Discharge Curve



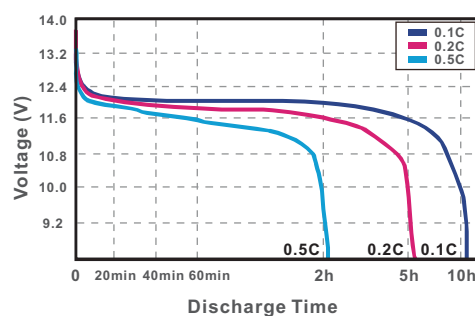
Different Temperature Discharge Curve

Different Temperature Discharge Curve @0.5C



Different Rate Discharge Curve

Different Rate Discharge Curve @25°C



Features

