



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-12-12V2	Dimension	152(L)*98(W)*98(H)mm
Nominal Voltage	12.8V	Weight	Approx 1.5kg
Nominal Capacity	12Ah(153.6Wh)	Battery Cell Connection	4S2P
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	12A	Storage Temperature	0°C~25°C(Recommended)
Maximum Discharging Current	12A	Self Discharge Rate	≤2% per month @25°C
Load Power	≤153.6W	Number of Cycles	≥2000 cycles at 80% DOD
Internal Impedance	≤50mΩ	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	2.4A
Maximum Charge Current	12A@25°C
Peak Charge Current	15A (1S)@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	<14.4V (3.6V/Cell)
Balancing Current	35mA

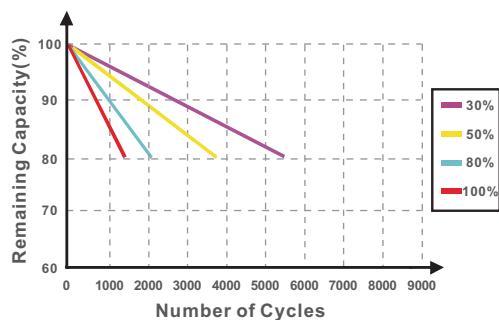
Discharge Performance

Recommended Discharge Current	2.4A
Maximum Continuous Discharge Current	12A@25°C
Peak Discharge Current	25A (5s)@25°C
BMS Discharge Cut-Off Current	30A (100ms)
Recommended Low Voltage Disconnect	9.6V (2.4V/Cell)
BMS Discharge Cut-Off Voltage	9.2V (2.3V/Cell)
Reconnect Voltage	>10.8V (2.7V/Cell)
Short Circuit Protection	200±50A

Characteristics Curve

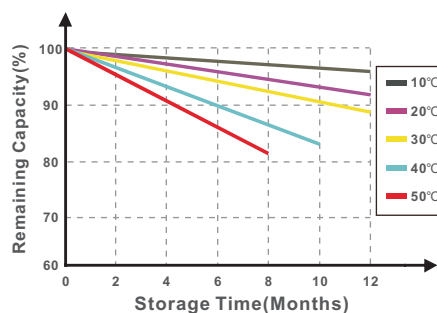
Cycle Life Curve

Different DOD Discharge Cycle Life Curve @25°C



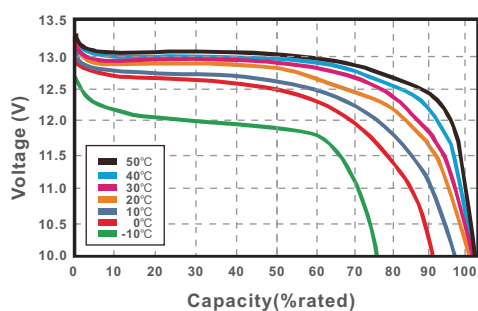
Self Discharge Characteristics Curve

Different Temperature Self Discharge Curve



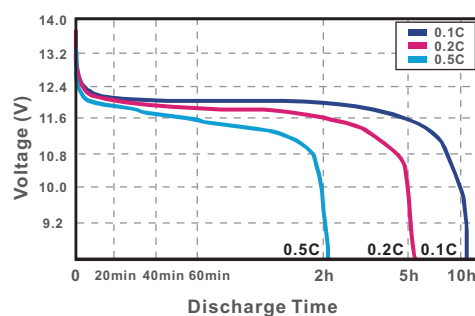
Different Temperature Discharge Curve

Different Temperature Discharge Curve @0.5C



Different Rate Discharge Curve

Different Rate Discharge Curve @25°C



Features

