



12-100DV2

100Ah
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-12-100DV2	Dimension	330(L)*172(W)*215(H)mm
Nominal Voltage	12.8V	Weight	Approx 11.8kg
Nominal Capacity	100Ah (1.28kWh)	Battery Cell Connection	4S1P
Charge cut-off voltage	14.6V	IP Protection Level	IP20
Discharge cut-off voltage	10.0V	Terminal Type	M8
Maximum Charging Current	100A	Charging Temperature Range	0°C~45°C
Maximum Discharging Current	100A	Discharging Temperature Range	-20°C~60°C
Load Power	≤1280W	Storage Temperature	-10°C~45°C
Internal Impedance	≤20mΩ	Self Discharge Rate	≤2% per month @25°C
Open Voltage	12.8V~13.2V	Number of Cycles	≥6000 cycles at 80% DOD
Charging Method	CC/CV	Adopted Standard	IEC62619 designation

Charge Performance

Recommended Charge Current	20A
Maximum Charge Current	100A@25°C
Peak Charge Current	110A (1S)@25°C
Recommended Charge Voltage	14.4V
BMS Charge Cut-Off Voltage	<14.6V (3.65V/Cell)
Reconnect Voltage	>14.4V (3.6V/Cell)
Balancing Voltage	<13.52V (3.38V/Cell)
Balancing Current	40mA

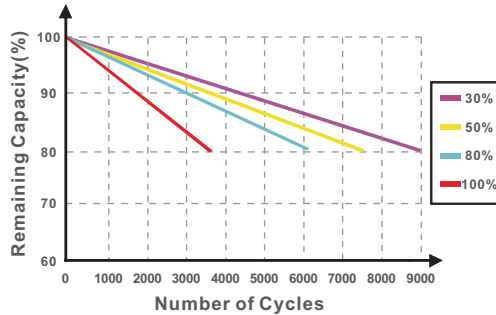
Discharge Performance

Recommended Discharge Current	20A
Maximum Continuous Discharge Current	100A@25°C
Peak Discharge Current	200A (5s)@25°C
BMS Discharge Cut-Off Current	150A (100ms)
Recommended Low Voltage Disconnect	10.0V (2.5V/Cell)
BMS Discharge Cut-Off Voltage	8.8V (2.2V/Cell)
Reconnect Voltage	>10.8V (2.7V/Cell)
Short Circuit Protection	200~800us

Characteristics Curve

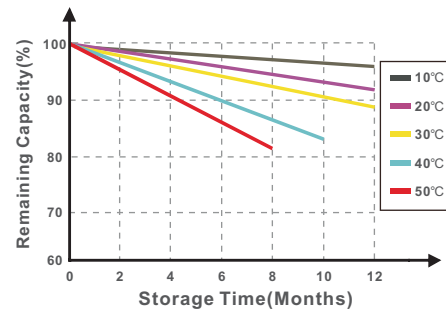
Cycle Life Curve

Different DOD Discharge Cycle Life Curve @25°C



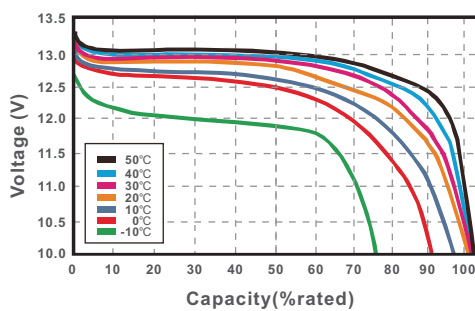
Self Discharge Characteristics Curve

Different Temperature Self Discharge Curve



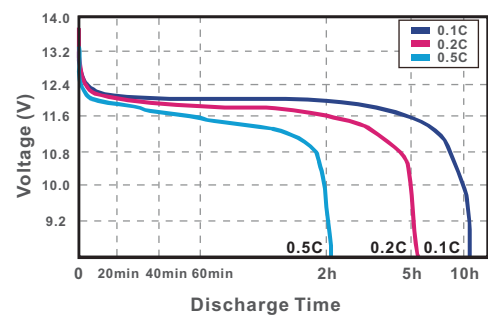
Different Temperature Discharge Curve

Different Temperature Discharge Curve @0.5C



Different Rate Discharge Curve

Different Rate Discharge Curve @25°C



Features

BMS

Built-in intelligent BMS for battery protection



Display on LED screen



Max. 4 series and 4 parallel



High cycle life

6000 cycles @80% DOD for effectively lower total of ownership cost.



Maintenance Free

100% sealed plastic case



Built in circuit protection

Intelligent integrated BMS to manage battery cells for safe and efficient operation



Better storage

Up to 6 months thanks to its extremely low self discharge(LSD) rate and no risk of sulphation.



Quick recharge

Save time and increase productivity with less down time thanks to superior discharge/charge efficiency.



Extreme heat tolerance

Suitable for use in a wider range of applications where ambient temperature is unusually high: up to +60°C.



Light weight

Lithium batteries provide more Wh/Kg while also being up to 1/3 the weight of its SLA equivalent.