

OGRPHY

Shenzhen Ogrphy Technology Co., Ltd

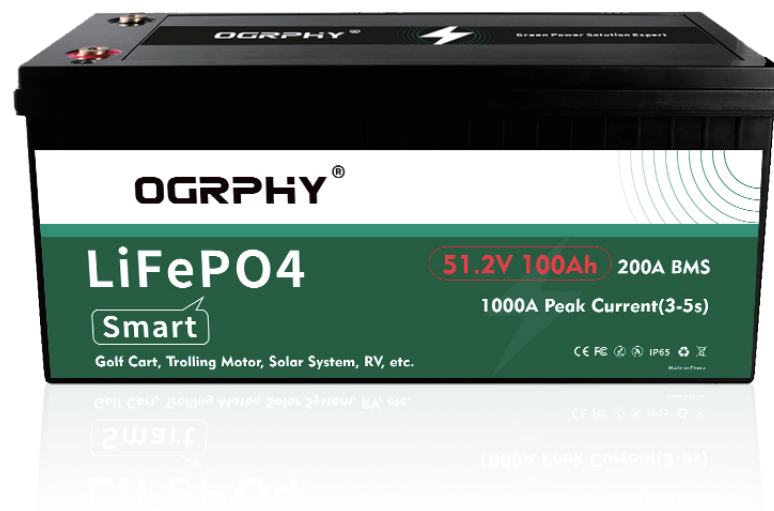
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OGRPHY®

# PRODUCT MANUAL

Smart LiFePO4

51.2V 100Ah



OGRPHY

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## THANK YOU FOR CHOOSING OGRPHY.

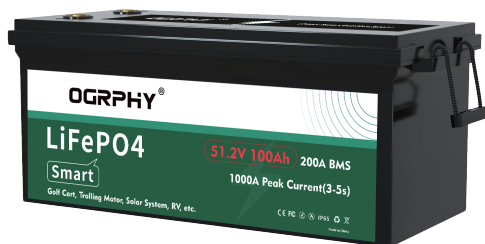
Pls read the product manual carefully before using the unit. Using the LiFePO4 battery in a proper way helps you maximum its performance, extend cycle life, and avoid unnecessary damage.

Ready? Start to create your green and powerful life with Ogrphy now!

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## PRODUCT SPECIFICATIONS



**Smart**  
**51.2V 100Ah**

Nominal Voltage	51.2V
Charge Voltage	56.8V-58.4V
Nominal Capacity	100Ah
BMS Board	200A
Energy	5120Wh
Max Load Power	10.24KW
Recommend Charge Current	30A
Max Continuous Discharging Current	200A
Peak Current	1000 A (3-5s)
Cycle Life	4000 times DOD80% (0.5C)
Working Temperature	Charging Temperature: 32 to 131 °F (0 to 55 °C) Discharging Temperature: -4 to 140 °F (-20 to 60 °C)
Weight	88.1lbs
Dimension	20.4*10.6*8.6inch
Recommend Solar Panel Configuration (Fully charges with effective sunshine 4.5h/day)	1760W
Wire(s) for Series & Parallel Connection / Loading	4AWG
Efficiency	99%

## CAUTIONS&WARRANTY

### CAUTIONS:

- DO NOT short circuit
- DO NOT reverse charging
- DO NOT disassemble
- DO NOT drop
- DO NOT expose to heat or immerse in water
- Away from kids and pets

### WARRANTY:

We commit you five years warranty for each Ogrphy battery, only if the battery is being correctly used according to our guidance and instructions. If you need our assistance, pls contact our service team for support. We promise to reply you in 24 hours.

If the battery can not be fixed, pls contact our customer service for prepaid return label, then send back the battery back to our warehouse. After we receive the return item, we will arrange the replacement or refund.

### WARRANTY CARD

Thankyou for purchasing Ogrphy LiFePO4 battery.

Fill in for future reference

Date Purchased: \_\_\_\_\_ Tel: \_\_\_\_\_

Order No.: \_\_\_\_\_ Email Add: \_\_\_\_\_

## CHARGE&DISCHARGE

Recharge the battery at 20% capacity left will increase the cycle times of the lifepo4 battery.

### RECOMMEND CHARGING METHOD:

Option 1: Use lithium iron phosphate battery charger, with charging voltage 56.8V-58.4V

Option 2: Use inverter/controller, select 48V lithium iron phosphate battery mode and set as below,

### SETTING for CHARGE CONTROLLER:

#### CHARGE

- Charging limit voltage: 58.4V
- Overvoltage disconnect voltage: 60V
- Overvoltage re-connection voltage: 56.8V

#### DISCHARGE

- Low voltage disconnection voltage: 43.2V
- Low voltage reconnection voltage: 46.4V
- Undervoltage warning voltage: 49.6V

### CHARGING/DISCHARGING TEMPERATURE REQUIREMENT:

Charging Temperature: 0°C to 55°C

Discharging Temperature: -20°C to 60°C

## CHARGE&DISCHARGE

### DOWNLOAD THE BLUETOOTH APP

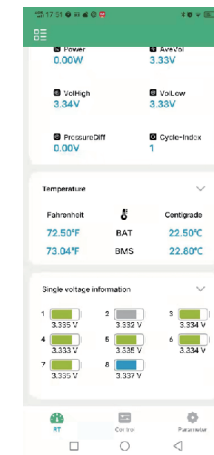
Pls scan with the APP below for installation to monitor battery's state for a better management.

Password: 666666

Android



Apple



### DEPTH OF DISCHARGE(DOD)

DOD 100% (charging 100%, and discharging 100%), the battery gets 2000 circles  
DOD 80% (charging 100%, and discharging 80%), the battery gets 5000 circles



## CONNECTION TIPS

### PREMISE OF CONNECTION:

To connect batteries in parallel, batteries are supposed to be

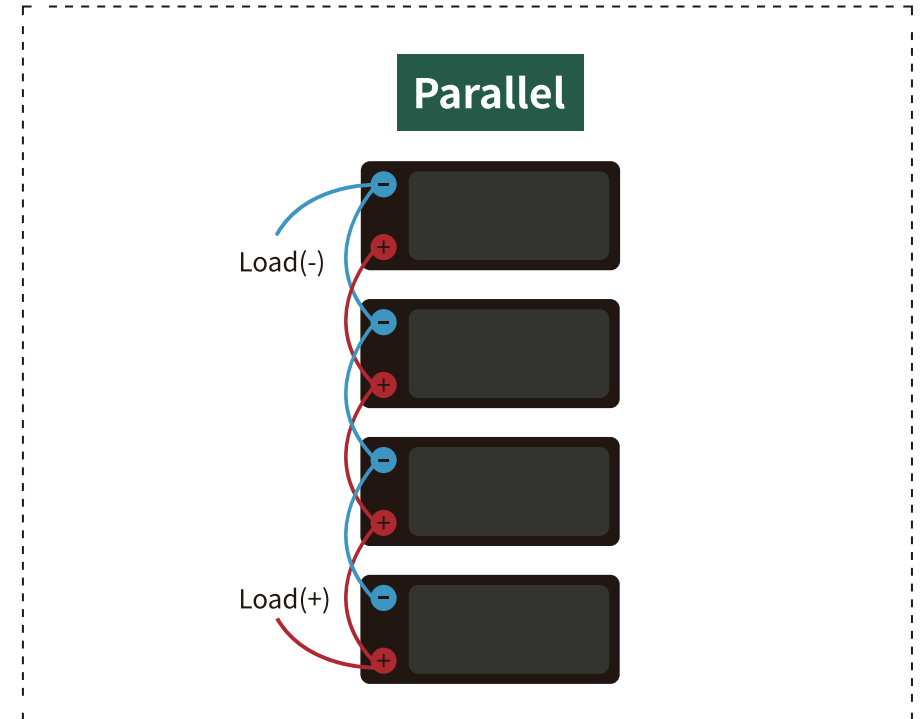
- with same capacity (Ah)
- from same brand (in case of different BMS)
- in short purchase interval (within one month)

### LIMITATION FOR PARALLEL CONNECTION

Support connection up to 4 parallel.

E.g, connect 4 pcs 48V 100Ah batteries in parallel, you'll got 48V 400Ah battery system

## PARALLEL CONNECTION



## MAINTENANCE AND STORAGE:

Charge your battery every 3 months if it hasn't been used for a long time

Storage Environment: 0°C to 45°C@60±25% relative humidity

## HOW TO ACTIVATE THE BATTERY WHEN BMS CUT IT OFF FOR PROTECTION?

The built-in Battery Management System(BMS) provides protection for overcharge, over-discharge, overload, overheating and short circuit.

If the BMS has cut off the battery for protection, cut off the load and charge the battery for reactivation. The battery will automatically recover itself to normal voltage then, and **you may use the battery after it fully charged.**

**If the battery is unable to recover itself and its voltage is too low to hold a charge, you can activate it in below ways:**

- ① Use the charger with 0V charging function to fully charge the battery
- ② Parallel with another 48V lithium battery(or 48V-58.4V lead-acid battery) for a minute
- ③ Use 60V-72V solar panel to charge the battery for about 10 minutes.

**For Ogrphy customers**  
**who request a warranty, return or exchange**  
**We are here to help**

 [service@ogrphytech.com](mailto:service@ogrphytech.com)