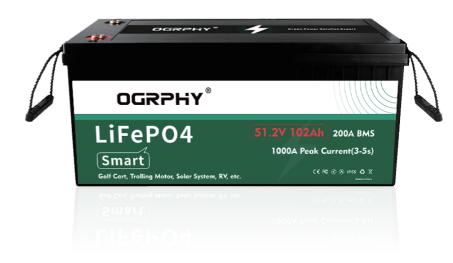
# **OGRPHY**®

## PRODUCT MANUAL

**Smart LiFePO4** 

48V 102Ah

## 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 48V 102Ah

Nominal Voltage	51.2V
Charge Voltage	56.8V-58.4V
Nominal Capacity	102Ah
BMS Board	200A
Energy	5222.4Wh
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	Charg ing Temperature: 32 to 131 °F (0 to 55 °C) Dischar ging 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:

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### **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 42.6V-43.8V

Option 2: Use inverter/controller, select 36V lithium iron phosphate battery mode and set as below,

## SETTING for CHARGE CONTROLLER: CHARGE

• Charging limit voltage: 43.8V

• Overvoltage disconnect voltage: 45V

• Overvoltage re-connection voltage: 42.6V

#### **DISCHARGE**

• Low voltage disconnection voltage: 32.4V

• Low voltage reconnection voltage: 34.8V

Undervoltage warning voltage: 37.2V

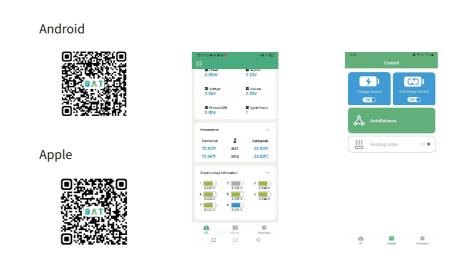
## CHARGING/DISCHARGING TEMPERATURE REQUIREMENT:

Charging Temperature: 0°C to 55°C Discharging Temperature: -20°C to 60°C

### **CHARGE&DISCHARGE**

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

Password:666666



#### **ATTENTION!**

During installation, in order to prevent the battery pack from generating a DC arc instantly when connected to the load, please log in to the Bluetooth APP.

Open the control page, click to turn off the charging MOS and discharging MOS, and then turn on the charging MOS and discharging MOS switches again after connecting the load.

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#### **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

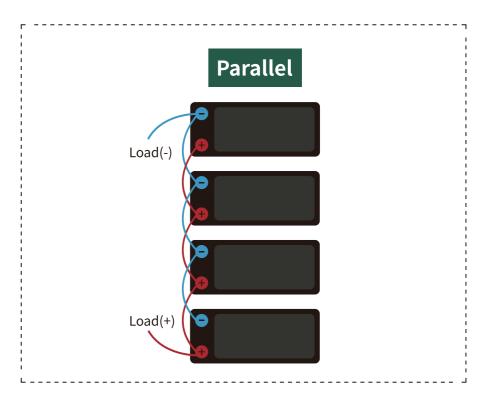
- with same capacity (Ah)
- from same brand (in case of different BMS)
- in short purchase interval (within one month)

#### LIMITATION FOR PARALLEL CONNECTION

Support connection up to 4 parallel.

E.g, connect 4 pcs 48V 102Ah batteries in parallel, you'll got 48V 408Ah 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:  $0^{\circ}$ C to  $45^{\circ}$ C@ $60\pm25\%$  relative humidity

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# 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:

①Use the charger with 0V charging function to fully charge the battery

When the battery pack is undervoltage protected and has no output, you need to use a charger to charge and activate it.

You need to connect the charger in the following order: First connect the charger output to the battery pack, and then connect the charger to the AC power.

This order can activate the lithium battery.

Otherwise, the lithium battery cannot be activated.

- ② Parallel with another 36V lithium battery(or 36V-43.8V lead-acid battery) for a minute
- ③Use 36V-54V 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