



PRODUCT MANUAL

48V 50Ah Smart LiFePO4 Batteries



HIMAX ELECTRONICS PTY LTD

Address: 39 Timor Circuit Keysborough VIC 3173

 www.himaxelec.com.au

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THANK YOU FOR CHOOSING HiMASSi.

Please read the product manual carefully before using this unit.
Proper use of the LiFePO4 battery will help achieve optimal performance, extend battery life, and prevent unnecessary damage.

Ready? Start building your green and powerful life.

PRODUCT SPECIFICATIONS

Nominal Voltage	48V
Charge Voltage	56.8V-58.4V
Nominal Capacity	50Ah
BMS Board	100A
Energy	2560Wh
Max Load Power	7.68KW
Recommended Charge Current	50A
Max Continuous Discharging Current	100A
Peak Current	1,000 A (3-5s)
Cycle Life	5,000 times DOD80% (0.2C)
Working Temperature	Charging Temperature: 32 to 131°F (0 to 55 °C) Discharging Temperature: -4 to 140 °F (-20 to 60 °C)
Weight	55.1lbs(25Kg)
Dimension	13.7(14.9) x 12.5(13.7) x 8.6inch
Recommend Solar Panel Configuration (Fully charges with effective sunshine 4.5h/day)	1,100W
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:

HiMASSi provides a **three (3) year limited warranty** for each battery, applicable only when the product is **used, installed, and stored** in accordance with HiMASSi's guidelines and instructions.

For technical support or warranty assistance, please contact our service team directly. We will respond within **24 hours**.

If a battery is confirmed to be defective and cannot be repaired, HiMASSi will arrange a **replacement or refund** in accordance with our warranty policy.

CHARGE&DISCHARGE

Recharging the battery at approximately **20% remaining capacity** helps extend the cycle life of LiFePO₄ batteries.

RECOMMEND CHARGING METHOD:

Option 1:

Use a lithium iron phosphate (LiFePO₄) battery charger with a charging voltage of **42.6V–43.8V**.

Option 2:

Use an inverter/controller, select **36V** lithium iron phosphate (LiFePO₄) battery model and set as below.

Setting for Charge Inverter/Controller :

Charge:

- Charging Limit Voltage: **43.8V**
- Over-voltage Disconnect Voltage: **45.0V**
- Over-voltage Re-connection Voltage: **42.6V**

Discharge

- Low-voltage Disconnection Voltage: **32.4V**
- Low-voltage reconnection voltage: **34.8V**
- Under-voltage Warning Voltage: **37.2V**

CHARGING/DISCHARGING TEMPERATURE REQUIREMENT:

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

CHARGE&DISCHARGE

Download the Bluetooth APP

Please install and use the APP below to monitor the battery's status for improved management.



DEPTH OF DISCHARGE(DOD)

DOD 100% (Charging 100%, and discharging 100%), the battery gets **2,000 circles**.

DOD 80% (Charging 100%, and discharging 80%), the battery gets **5,000 circles**.

MAINTENANCE AND STORAGE:

If the battery has not been used for a long period, recharge it every **three (3) months**.

Store the battery in an environment with a temperature between **0°C and 45°C** and a relative humidity of **60% ± 25%**.

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

The built-in **Battery Management System (BMS)** provides protection against overcharging, over-discharging, overloading, overheating, and short circuits.

If the BMS has shut down the battery for protection, disconnect the load and recharge the battery to reactivate it.

The battery will automatically return to its normal voltage. You may use the battery again after **it is fully charged**.

If the battery cannot recover automatically and the voltage is too low to accept a charge, it may be reactivated using one of the following methods:

- a) **Use a charger with a 0V charging (pre-charge) function** to fully charge the battery.
- b) **Connect the battery in parallel** with another **36V lithium battery** or a **36V–43V lead-acid battery** for approximately **one minute**.
- c) **Use a 36V–54V solar panel** to charge the battery for approximately 10 minutes.

**For HiMASSi Customers
who need warranty support,
product returns, or replacements
We are here to help.**

 0452 268 938

 info@himaxelec.com.au