



Integrated Inverter Controller Integrated Machine

user manual

Safety instructions

Warning: this chapter contains important safety and operational instructions. Please read and Keep this manual for future reference.

- 1. Before using the device, read all the instructions and warning marks on the device, batteries, And this manual all relevant sections.
- 2. Note —To reduce the risk of injury, please only charge the deep cycle leadacid rechargeable battery. Other types of batteries it may burst, causing personal injury and damage.
- 3. Do not remove the equipment. When requiring service or repair, please send it to a qualified service center. Erroneous reassembly may cause a risk of electric shock or fire.
- 4. To reduce the risk of electric shock, disconnect all wiring before trying any maintenance or cleaning. Turn off the equipment and does not reduce this risk.
- 5. Note-Only qualified personnel can install equipment with batteries.
- 6. Never charge the frozen battery.
- 7. In order to optimize the inverter/charger, please select the appropriate cable size according to the regulations. Proper operation of this inverter/ charger is very important.
- 8. Be very careful when using metal tools on or around the battery. Tool drop may cause the battery or it his electrical parts produce sparks or short circuits, and may cause an explosion.
- 9. Strictly strictly follow the installation procedure. For details see this manual "an install" part.
- 10. Provide a 150A fuse for the battery power supply for overcurrent protection.
- 11. Ground instructions-This inverter/ charger shall be connected to a perman-ently grounded cabling system. Install this inverter please be sure to comply with the local requirements and regulations.
- 12. Do not cause ashort circuit of AC output and DC input. Do not connect the power supply when the DC input is short circuit.
- 13. Warning that only qualified maintenance personnel can repair the equipment. If trouble Shooting the troubleshooting table after the obstacle remains, please return the inverter/charger To the local dealer or service center for repair.

Controller adjustment must match the battery type. The maximum voltage input of the solar Panel is 150v.

(The input volt number of battery and inverter should be consistent)

1. Introduction

This is a multi-function inverter, combined inverter controller integrated machine, can provide uninterrupted power support, and small and portable volume. Its comprehensive Icd display Provides users with configurable and easy-to-use button operations, such as battery charging current, AC/ solar charger priority, and acceptable input voltage depending on different applications.

2. Line connection method

The correct wiring sequence of the solar energy controller is as follows:

- 1. First, connect to the positive and negative electrodes of the battery;
- 2. Finally connect to the positive and negative electrodes of the solar panel.



(Maximum voltage input of solar panel: 150V)

2.1 Installation of the equipment

Before selecting the installation location, consider the following points:

- 1. Do not install the inverter on the flammable building materials.
- 2. Mount it on a solid surface.
- 3. Install the inverter at the line of sight level to read the LCD display at any time.
- 4. In order to make the air circulation to dissipate heat, please leave a gap of about 20 cm on the back, and about 50 cm each on the equipment.
- 5. The ambient temperature shall be between 0 $^{\circ}$ and 55 $^{\circ}$ to ensure the optimal operation condition.
- 6. It is recommended to install it vertically on the wall.
- 7. Ensure that other objects and surfaces are shown to ensure.sufficient heat dissipation and sufficient reserve space to remove the wires.

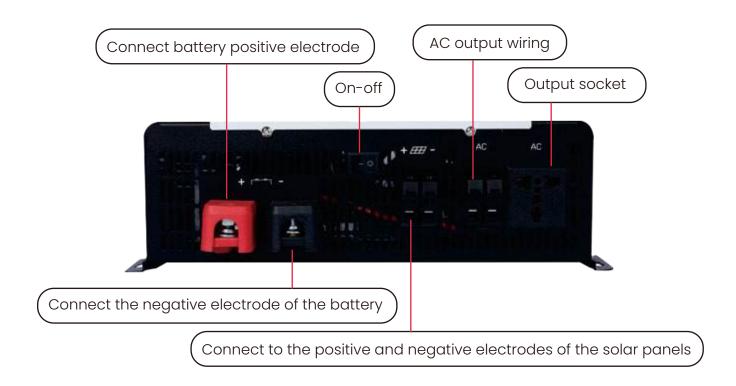


3. Appearance description

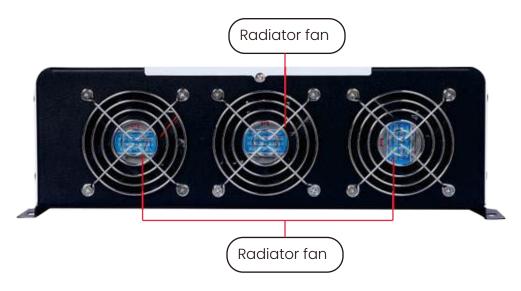


Inverter	4000W	3300W	3300W	2300W	1300W
Controller	100A	100A	50A	50A	25A

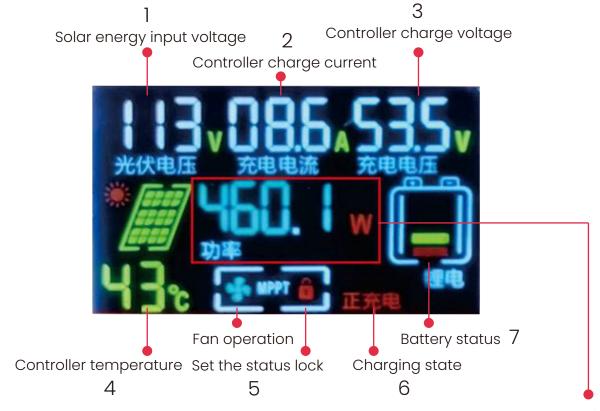
3.1 Appearance description



Connect to the battery line first and then connect to the solar panel. The maximum input voltage of the solar panel is 150V



4. LCD display description (controller)



Charging power display total geberating capacity of the controller 8

Number	Designation	Number	Designation
1	Solar energy input voltage	5	Whether to lock the state
2	Controller charge current	6	Charging state
3	Controller charge voltage	7	Battery status
4	Controller temperature	8	Total generating capacity of the controller

5. LCD display description (inverter)



Frequency and temperature rotation display

Intelligent digital display screen

Defencive function

- EOI Short circuit function fault
- E02 Power supply input under voltage fault prompt
- E03 High temperature protection tips
- **E04** Overload protection tips
- E05 Over voltage protection prompt
- E06 Front-stage power overload prompt

Functions and characteristics

- 1. MPPT high efficiency and intelligent control charging, peak efficiency of 99%.
- 2. Intelligent temperature control fan, when the temperature is greater than 45°C, the cooling fan is on and less than 40°C off.
- 3. Multiple protection, prevent overcharge, reverse connection, high temperature, over-power protection.
- 4. It can be applied to most batteries. The internal power supply of the controller is supplied by photovoltaic or battery, or it can be customized for independent power supply by photovoltaic terminal (to be customized).
- 5. All Chinese color LCD display, clear and intuitive display of operation data and charging status; power and power generation are automatically displayed in turn.

Installation operation instructions

- 1. Connect the solar panel and the controller cable, and display the screen if correct, and check whether the positive and negative electrades are correct.
- 2. Confirm the battery type and voltage, and set the charging type and charging voltage of the controller, that is, the battery full voltage.
- 3. If the battery to be charged does not meet the factory default parameters, you need to go to the setting step and reset, and follow the following steps:
- (3.1) Long press the setting button on the panel, you can see the setting state lock icon disappear and enter the setting state.
- (3.2) If it is lithium battery or lead acid battery, you need to short press the setting button to find the corresponding battery type and charging voltage. After finding it, long press the setting button to lock the setting parameters.

Model parameter

Product model	Inverter	Controller	
1300W 25A	1300W	25A	
2300W 50A	2300W	50A	
3300W 50A	3300W	50A	
3300W 100A	3300W	100A	
4000W 100A	4000W	100A	









Notes for installation and use

- 1. High voltage input solar controller, solar panel input voltage 1 cannot exceed 145 volts (Voc 145V).
- 2. It is strictly prohibited to charge low gear voltage battery in high voltage gear. The setting type and voltage should be consistent with the charged battery.
- 3.DC equipment is strictly prohibited to connect positive and negative, pay attention to the difference between positive and negative.
- 4. It is strictly prohibited to replace the large size fuse or replace it with copper wire. When it needs to be replaced, the fuse with the same specifications should be replaced.
- 5. The solar panel belongs to the series module, should be placed in the sun should avoid shielding, cloudy or night when the solar energy is no electricity, solar controller does not work, and does not consume battery power.
- 6. The internal power supply of this series of controllers is provided simulta-neously by the photovoltaic or storage battery.
- 7. When connecting the battery should repeatedly and carefully confirm the positive and negative polarity, otherwise it will burn out the controller in surance, especially the old master wiring to pay attention to.
- 8. The controller connected to the solar panel or battery wire should be as short and thick as possible, is conducive to reduce the line loss and improve the efficiency of power generation.
- 9. The installation of the controller should be considered stable, to ensure that the wiring insulation, do a good job of waterproof measures, to avoid children touch, accidental touch.
- 10. The open circuit voltage of the solar panel is the voltage measured without any load, and shall not exceed the maximum input voltage required by the controller.

Quality Assurance Card

Pure sine wave inverter must be strictly checked before leaving the factory to ensure good quality. We assure you that the machines listed in the card have good performance and complete parts. One year free warranty, as follows.

- During the one-year warranty period for the purchase of the machine, if any damage or failure occurs, the machine will be provided free of charge to repair and replace the parts, and the damaged parts will be returned to our company.
- The warranty period will automatically expire if the machines specified in this guarantee card are in the following circumstances.
- 1.Change of company trademark;
- 2.Damage caused by faulty operation, negligent use and force majeure;
- 3.The company's technical personnel without authorization to repair, modify or alter, remove machine number or seal;
- 4.Do not install according to the installation instructions provided by the original factory.
- E. Please keep this card properly and present this certificate and purchase receipt (invoice) to technician at repair time.

User information sheet

User units	Contact Person
User address	Contact number
Distribution Unit	Postcode
Product model	Local number
Purchase time	Handling Personnel

Maintenance log

Date	Type of maintenance	Summary	Maintenance man	User signature

Note: please fill in the user information ,copy one copy and seal it and send it back to our marketing department for filing



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