# WD Pure Sine Wave Inverter
# WD-T Hybrid Solar Inverter

## User Manual

# Content

⚠ **Warning**

This is A class inverter. It might cause slightly radio interference in daily life. And practical
measure is required to take under this condition.

**Preface**

Thank you for the purchase of pure sine wave inverter (Hereinafter referred to as inverter). Please read this manual carefully before installing and using the inverter!

**Copyright**

We have been devoted to technological innovation and aims to meet the demands of its customers with better product and services. And product design and specification would be updated without prior notice. Please in kind prevail!

## 1.Installation Instructions

### 1-1: Open-package inspection

1. After opening the package, please check random accessories, including user manual (contains conformity certificate and warranty card ), 2pcs battery cables and accessories for optional functions. And check whether the inverter is still kept well after transportation, if find any broken or component missing, do not turn on the machine, feedback to the carrier and distributor.

**Note:**

➢ Please keep the packing box and packing material, can be used for next delivery if needed.

➢ This series of product is very heavy (check appendix as reference), please handle with care when carrying.

### 1-2: Installation notice

1) Install in an area of well ventilated, free of water, burning gas and corrodent.

2) Not good to put on the side, better keep good air ventilation from front panel's bottom air intake, or air outlet from back panel's fan, and side face of machine.

3) Around environment temperature should remain 0 to 40 centigrade.

4) If disassembling and operate under low temperature environment, may happen water condense, only can work till thorough dry of machine inside and outside, otherwise will be shock risk.

5) If the machine is placed for a long time, it should be confirmed that the machine is completely dry and no corrosion can be installed and used.

### 1-3:Installation steps

1) Environmental requirements

Open the package and place the inverter in a reasonable working environment. Refer to the "Installation Precautions" for specific requirements.

2) Wire diameter selection

Use a cable with a suitable wire diameter, which can not be lower than the national safety standard. The general wire diameter is selected according to the current density of not more than 5A/mm², and the length of the connecting wire is minimized to reduce the loss.

3) Connect the battery

Determine the appropriate number of battery cells according to the rated battery voltage of the inverter. Connect the battery cable to a circuit breaker that meets the breaking capacity, and then connect it to the BATTERY terminal of the inverter. Note that the positive and negative poles cannot be reversed. Otherwise, the product may be damaged.

4) Connecting the load

Turn off all loads firstly, then connect the DC load to the DC output of the inverter (DC OUTPUT)(Ignore this step if there is no built-in controller), and connect the AC load to the AC output of the inverter (AC OUTPUT), confirming that the load polarity is not reversed, and ensure the load is lower than the standard power of the inverter.

5) Connecting PV(Ignore this step if there is no built-in controller)

Connecting the PV, the PV array voltage and current should be lower than the maximum PV input voltage and current of the rated charge controller. Connect the PV cable to the circuit breaker that meets the breaking capacity, and then connect it to the PV input terminal of the inverter. Note:Be careful not to reverse the polarity.

6) Connect to mains

Connect the mains input cable to a circuit breaker that meets the breaking capacity, and then connect it to the AC input terminal of the inverter. Note that the phase and polarity are not reversed.

7) Selection of circuit breaker

a. The circuit breaker on the battery side should be a DC circuit breaker whose working voltage should be greater than the rated voltage of the battery; the circuit breaker on the AC input side should be an AC circuit breaker whose working voltage should be greater than the rated voltage of the mains.

b. The rated current of the circuit breaker should be about 1.5 times of the maximum current inverter during operation .

**Note:**

➤ Before connecting the load to the machine, please turn off the loads firstly.

➤ To ensure the personal safety of the user and ensure the correct use of the product, please confirm that it is properly grounded before starting the machine.

➤ If user want to load an inductive load such as a motor or a laser printer which operating power is too large, the inverter rated capacity should be selected according to its peak power .The load starting power is generally 2 to 3 times of its rated power.

### 1-4: Placement
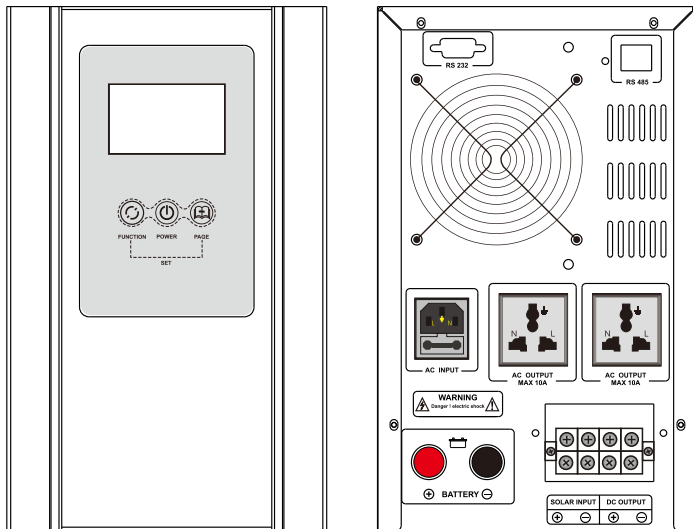
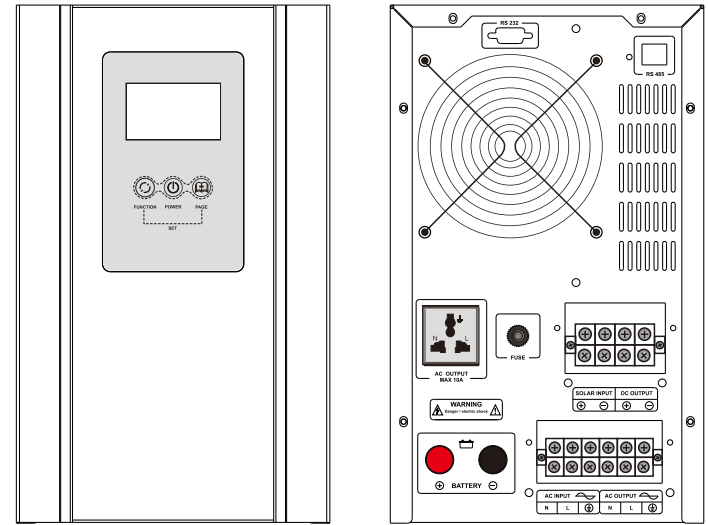Please leave 10cm of space for each side of inverter to keep good air circulation.
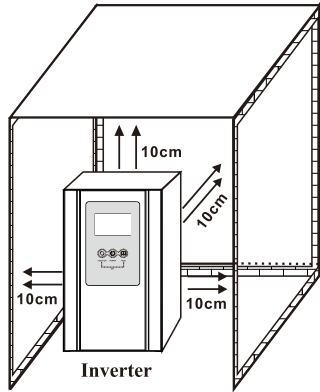


★ Avoid direct sunlight

★ Avoid dust

★ Avoid moisture and liquids
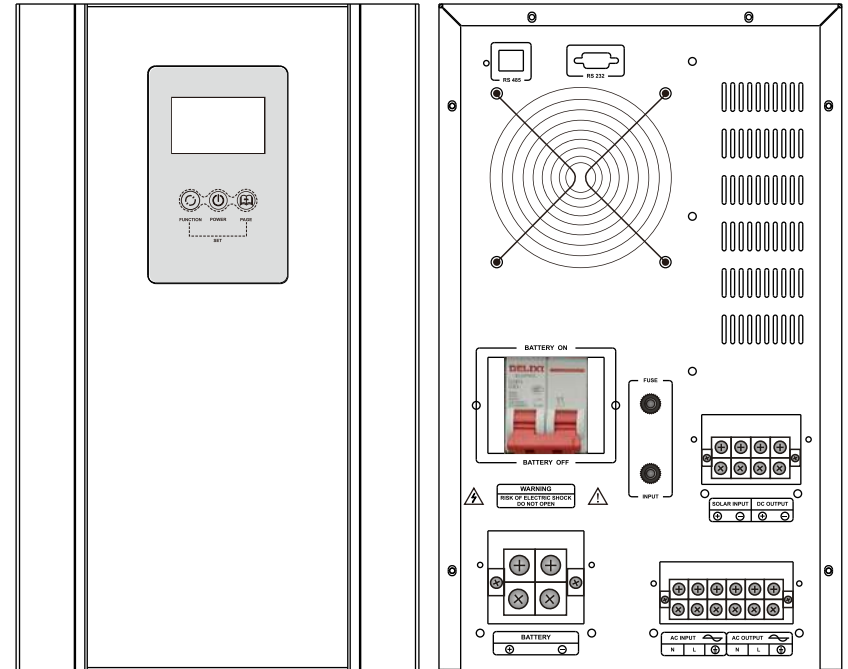
★ Avoid over heating
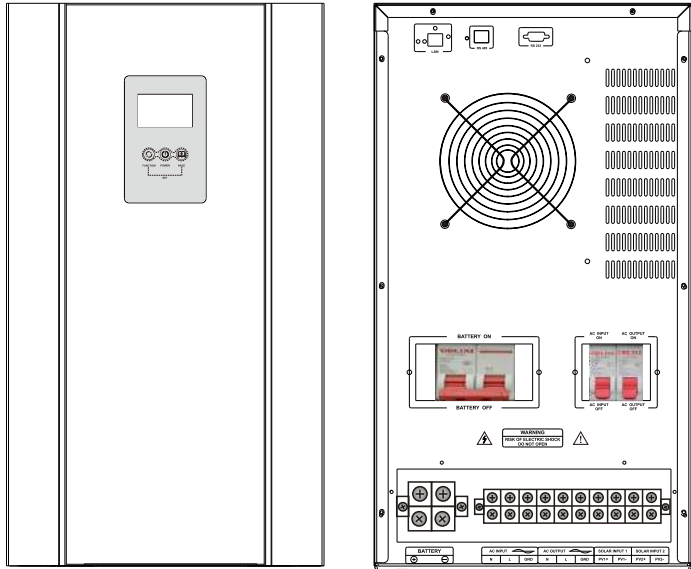
## 2. Outlook of Inverter

### 2-1. 700W-1500W Series
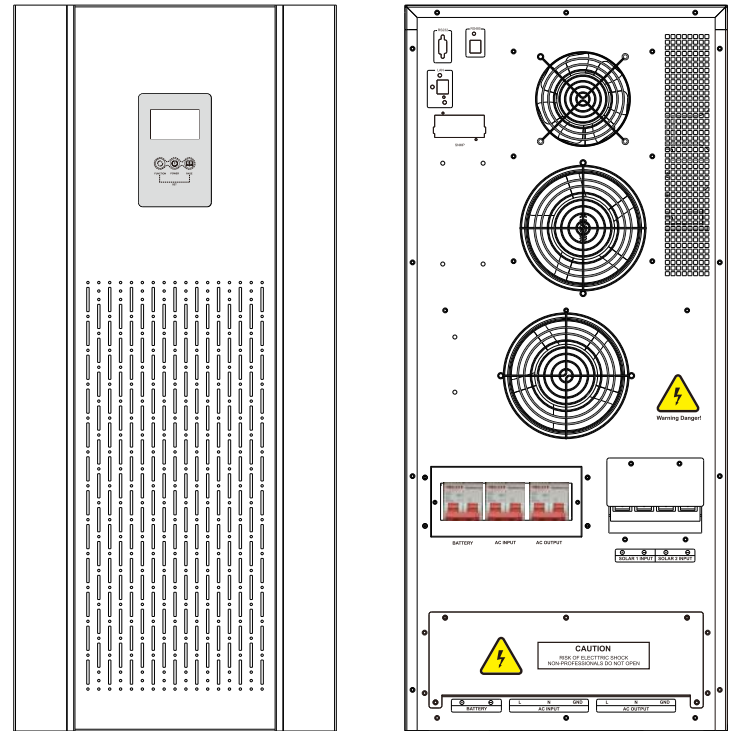


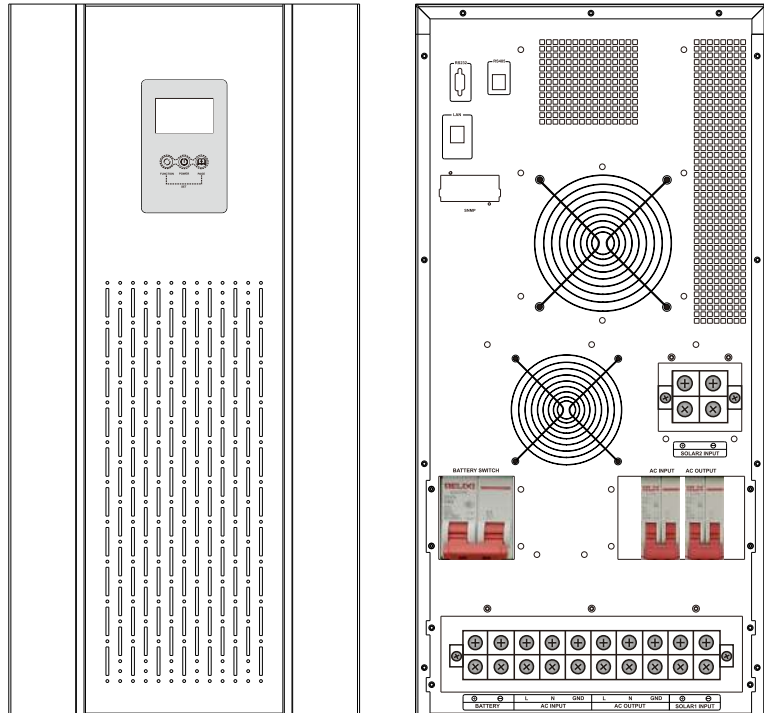### 2-2. 2000W-3500W Series



### 2-3. 4000W-7000W Series

## 2-4. 8KW-12KW Series
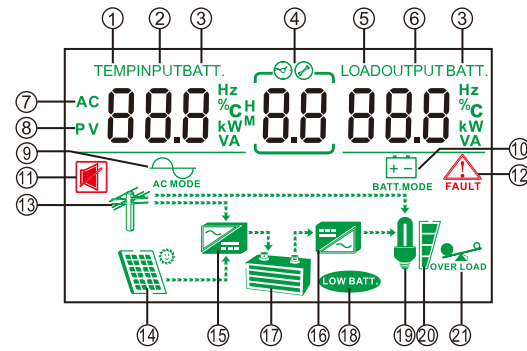


## 2-5. 15KW-25KW Series



## 2-6. 30KW-40KW Series



**Note:** Images may be slightly different from actual product. Please in kind prevail!

## 3. LCD screen description



### Parameter display area

| | |
|---|---|
| 1 TEMP: Temperature displayed | |
| 2 INPUT: Mains input data displayed | |
| 3 BATT: Battery data displayed | |
| 4  1) Working mode setting: d1=Mains priority mode; d2=Energy saving mode; d3=Battery (Solar) priority mode <br> 2) AC charging current setting: (C0~C6, C0=0A, C6 is the maximum AC charging current); <br> Remark: When emergency come, shows alarm code here. | |
| 5 LOAD: Load data displayed | |
| 6 OUTPUT: AC output data displayed | |
| 7 AC: AC data displayed | |
| 8 PV: PV input data displayed | |

## Icon display area

| 9 AC MODE:AC mode(means the inverter is already on d1 or d2 (Based on the real setting value) | | |
|---|---|---|
| 10 BATT.MODE:  BATT.MODE means the inverter is already on d3:battery mode | | |
| 11 Turn mute on/off | 12 FAULT:   fault alarm | |
| 13 Utility | 14 Solar panel(Display when there is a built-in PV controller) | |
| 15 AC charging and PV charging icons | 16 Battery powered icons | |
| 17 Battery | 18 Low battery alarm | 19 Load |
| 20 Load capacity(The load is divided into 4 grids, and the single-grid load is 25% of the full load) | | |
| 21 Overload alarm | | |

### 3-1. Work flow chart icon introduction(Built-in solar controller)

1)Mains working mode (No PV input, Only the mains charge the battery)

2)Mains working mode (Has PV input, the mains and the PV simultaneously charge the battery)

3)Battery working mode (No mains and PV input)

4)Battery working mode (Has PV input but no mains input, only the PV charge the battery)
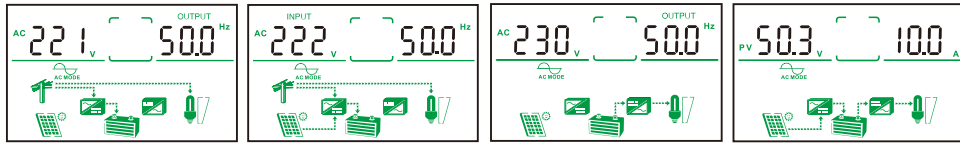


### 3-2. Introduction to the work interface(Built-in solar controller)(Mains and PV input are normal )

1) Output interface(Display output voltage and frequency)

2) AC input interface(Display AC input voltage and frequency)

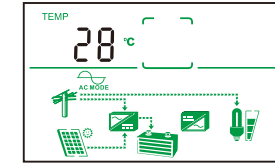3) PV interface(Display PV voltage and PV current)
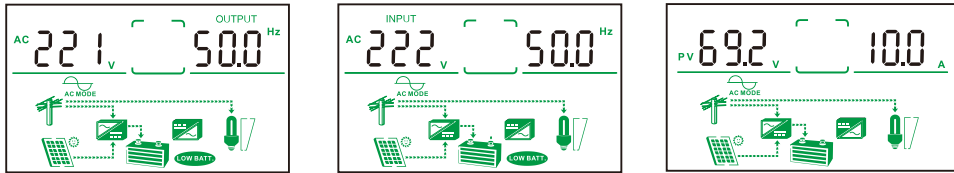


4) Battery interface(Display battery voltage and percentage)

5) Loads interface(Display load power and load percentage)

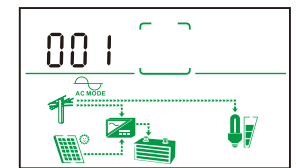6) PV generation capacity / Actual power generation interface
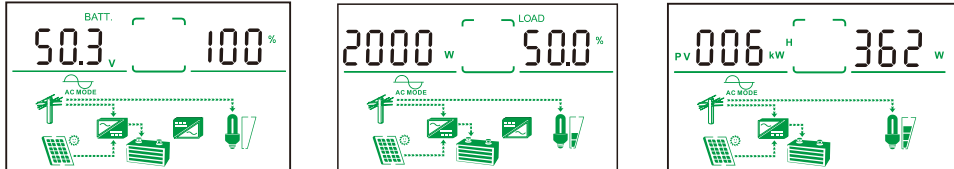


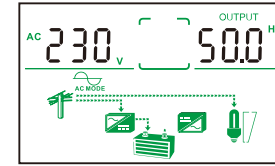7) Controller Max charging current interface
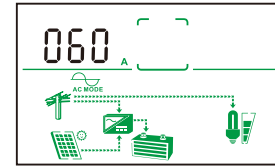
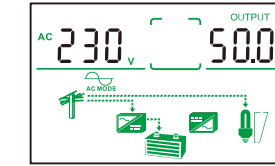8) Internal temperature interface

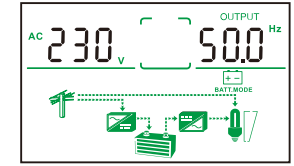9) Communication address interface



### 3-3. Three working modes

1) d1:Mains priority mode (Display AC MODE icon, the working mode depends on the setting value)

2) d2: Energy saving mode (Display AC MODE , the working mode depends on the setting value)

3) d3: Battery priority mode (Display BATT.MODE icon)



**Note:**

**1. If the inverter has no built-in solar controller, the LCD screen does not display the solar panel icon and the PV parameter interface, and the other displays are consistent.**

**2. The actual display parameters are subject to the specific model, and the picture display contents are only used as examples.**

**3. Models of 700W~7000W do not display the load interface.**

Remarks:Introduction to three working modes

**1) Mains priority mode(d1)**

● When the mains is normal (in line with the mains input voltage range of the inverter), the  mains  charge battery (if with built-in solar controller, the mains and PV charge  the battery simultaneously);on the other hand, the mains supplies stable power to the loads after stabilization. (the loads do not consume PV and battery energy);

● When the mains is abnormal(the mains exceeds the working range of the inverter or the mains supply is interrupted), the  loads  will  be  powered  by the battery(if with built-in controller, when PV power rate is larger  than the loads, PV will power the  loads  and t he  surplus  energy  will  charge the battery; when PV power rate is less than the loads, the deficiency will be made up by battery, so both PV and battery will  power the loads).

**2) Battery(Solar) priority mode(d3)**

● When the battery is fully charged (like single-cell battery voltage is up to 13.2VDC),even the mains is normal, the loads  will  be  powered  by the battery(if with built in controller, when PV power rate is larger than that of the loads, PV will fully powers the loads and the surplus energy will charge the battery; when PV power rate is less than the loads, the deficiency will be made up by battery, so both PV and battery will power the loads);

● When  the  battery  is  in  low  voltage ( the voltage of regular single-cell battery is 11VDC) and the mains is normal, the inverter will switch to mains priority mode. The mains supplies power to the load after stabilization,and the mains charges battery simultaneously(if with built-in controller, PV and the mains charge the battery simultaneously. The loads do not consume the energy of PV and battery).

**Remarks: Under Mains Priority Mode/ Battery Priority Mode, when the mains charging current is not set as 0A, the mains charge battery; when the mains charging current is set to 0A, the mains does not charge  battery, but the solar controller charges the battery.**

**3) Energy saving mode(d1)**

● Inverter works under the battery mode, once the load  capacity is less than 20%(700W~7000W models) / 5%(8KW ~40KW models) of the inverter rated power, the inverter will start and stop regularly to achieve energy saving effect (ie: the machine will intermittently interrupt the inverter output); When the load is greater than 20%(700W~7000W  models) / 5%(8KW~40KW models) of the inverter rated power, the inverter will out of this energy saving mode.

# 4. Operation

**Function and setting of button on board**

FUNCTION   POWER   PAGE

SET
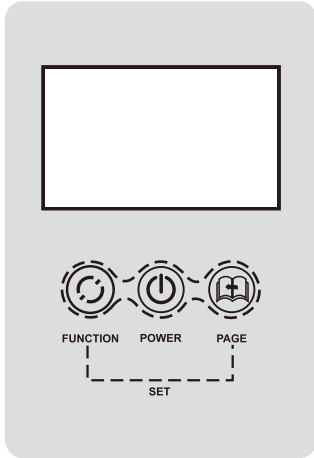
**4-1: POWER button**

◆ Battery supply state: Power on, press POWER button for 2 second, the equipment start output; Power off, press POWER button for 2 second, the equipment shutdown.

◆ AC supply state: Power on, the equipment will auto start when AC supply input; Power off, press POWER button for 1 second, the equipment turn off output, the equipment shutdown after cut off AC supply.

**4-2: PAGE button**

◆ Page scroll: in the main interface, short press the PAGE button for 1 second to view various parameter interfaces, such as output interface, input interface, battery interface, and etc.;

◆ Parameters setting: in the parameters setting interface, short press the PAGE button for 1 second to adjust the parameter value.

**4-3: FUNCTION button**

◆ Mute function: In the main interface, press the FUNCTION button for 1 second to turn on/off alarm.

◆ In the main interface, long press the FUNCTION button for 3 seconds to enter the parameters setting interface. First long press FUNCTION button for 3 seconds to enter work mode setting interface, press PAGE button to set work mode(d1=Mains priority mode; d2=Energy saving mode; d3=Battery(Solar) priority mode); second long press FUNCTION button for 3 seconds to enter charging current setting interface, short press PAGE button to set charging current(C0~C6, C0=0A, C6 is the maximum AC charging current); third long press FUNCTION button for 3 seconds to save data and exit setting interface.

**Note: Value of AC charging current and working mode takes immediately.**

**4-3: Steps of start up**

1) Connect loads to the AC output of inverter.

2) Connect mains power and batteries, please notice the negative andpositive side during wiring(refer to chapter 5 for wiring).

3) Press POWER button to start the inverter(start automatically under the state of mains power).

4) After 30s when the output is stable, start loads in turn.

**4-4: Steps of power off**

1) Disconnect loads.

2) Press POWER button to disconnect AC output.

3) Disconnect mains power and inverter shut down.

# 5. Wiring

(Remarks: Please refer to the technical parameter table for specific battery voltage and solar panel parameter, This diagram is only for wiring diagram. 12V system: single 12V battery; 24V system: 2 units 12V battery connect in series; 48V system: 4 units 12V battery connect in series; 96V system: 8 units 12V battery connect in series; 192V system: 16 units 12V battery connect in series; 240V system: 20 units 12V battery connect in series; 384V system: 32 units 12V battery connect in series.)

**5-1. 700W-1500W Series**
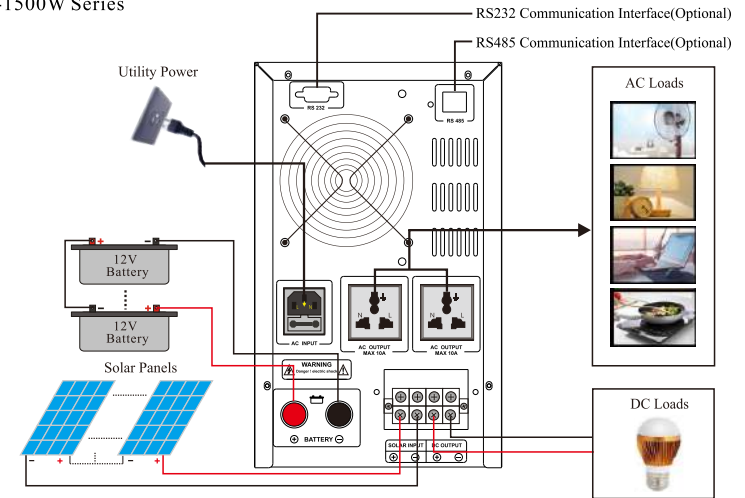
**5-2. 2000W-3500W Series**

## 5-3. 4000W-7000W Series

RS485 Communication Interface(Optional)

RS232 Communication Interface(Optional)

Solar Panels

DC Loads

AC Loads

Neutral Wire(N)

Live Wire(L)

Utility Power

12V Battery

12V Battery

12V Battery

12V Battery

Earth Wire

Live Wire(L)

Neutral Wire(N)

## 5-4. 8KW-12KW Series

RS485 Communication Interface(Optional)

RS232 Communication Interface(Optional)

AC Loads

Live Wire(L)

Neutral Wire(N)

Solar Panels 1

Solar Panels 2

12V Battery

12V Battery

12V Battery

12V Battery

Utility Power

Earth Wire(GND)

Live Wire(L)

Neutral Wire(N)

## 5-5. 15KW-25KW Series

RS485 Communication Interface(Optional)

RS232 Communication Interface(Optional)

Solar Panels 2

Solar Panels 1

12V Battery

12V Battery

12V Battery

12V Battery

AC Loads

Utility Power

Neutral Wire(N)

Live Wire(L)

Live Wire(L)

Neutral Wire(N)

Earth Wire(GND)

RS485 Communication Interface(Optional)

RS232 Communication Interface(Optional)

Solar Panels 1

+ − [.......:.......] + −

Solar Panels 2

+ − [.......:.......] + −

Warning Danger!

BATTERY   AC INPUT   AC OUTPUT

SOLAR 1 INPUT   SOLAR 2 INPUT

AC Loads

12V Battery     12V Battery

12V Battery     12V Battery

BATTERY       AC OUTPUT       AC OUTPUT

BATTERY   AC OUTPUT   GND   L   N   GND

Live Wire(L)

Neutral Wire(N)

Utility Power

Live Wire(L)

Neutral Wire(N)

Earth Wire(GND)

**Note:**

➢ Please avoid reverse connection while connecting batteries and PV to the inverter.

➢ If a generator is used as input power, the operation is as follow: start up the generator, after it runs steadily, connect and turn on inverter. When the inverter starts to work, connect user's equipment to the AC output.

➢ Capacity of generator≥3 times of the rated capacity of inverter.

## 6. Maintenance

1) The inverter just needs the minimum maintenance. And life of Pb(battery) can be preserved by frequent charge.
2) Batteries should be charged for every three months if the inverter is long-term unused.
3) Lifespan of battery normally lasts for three to five years. It should be replaced in advance if any battery is found in poor state. And the replacement shall be operated by the professional.
4) Batteries should be wholly replaced by the instruction of the supplier.
5) For every three months, batteries should be discharged (until the inverter shuts down) and recharged. Every charge (by standard inverter) should last at least for 12 hours.
6) Among high temperature area, batteries should be discharged and recharged forevery two months. Every charge (by standard inverter) should last at least for 12 hours.

**Note:**

➢ Please shut down the inverter and disconnect AC input before replacing batteries.
➢ Please do not wear metal jewelry such as ring or watch.
➢ Please use screwdriver with insulated handle and avoid to place tools or metal objects on batteries.
➢ Please avoid short circuit or reverse connection.

**Warning:**

1) **Battery must not be put in the fire, which may cause explosion.**
2) **Shall not open or damage the battery. Electrolyte released will cause harm to eyes and skin and even intoxication.**

## 7. Error and Solution

### 7-1: Regular error

| Error | Reason | Solution |
|---|---|---|
| Unable to boot | Low voltage in battery or overload | Charging the battery or reduce the loads |
| Shut down with load | Low voltage in battery or overload | Charging the battery or reduce the loads |
| Alarm for boot | Low voltage in battery or overload | Charging the battery or reduce the loads |
| Heat of connector | Poor contact | Check and fasten the screws |

### 7-2: Code for alarm

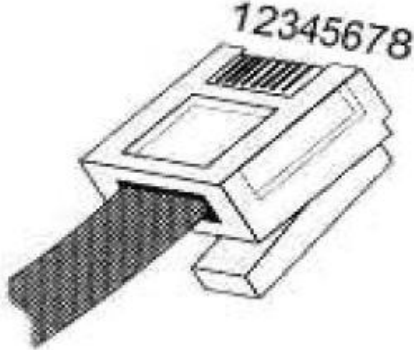| Code for alarm | Reason | Solution |
|---|---|---|
| 01 | Over temperature protection | Check and reduce some loads |
| 02 | Reversion of transformer | Please contact the supplier |
| 03 | Data-saving error | Please contact the supplier |
| 04 | Internal reference voltage error | Please contact the supplier |
| 05 | Output short circuit protection | Please check if user's equipment is short circuit. |
| 06 | Battery over voltage protection | Please contact the supplier |
| 07 | NTC error | Please contact the supplier |
| 08 | Communication failure of controller | Please contact the supplier |
| 11 | Overload alarm/protection | Please reduce the loads |
| 12 | Contra variant error | Please contact the supplier |
| 13 | Battery low voltage alarm | AC output is going to stop, please set as AC first with charging mode, and restart the inverter |
| 14 | Battery low voltage protection | Please turn into AC first with charging mode, and restart the inverte |
| 15 | AC over voltage alarm | Please check the AC input voltage |
| 16 | Battery over voltage protection | Please contact the supplier |

# 8. Technical specification

| Model: WD/WD-T | 70112/24 | 10212/24 | 15224/48 | 20224/48 | 30224/48 | 35248/96 |
|---|---|---|---|---|---|---|
| Rated Power | 700W | 1000W | 1500W | 2000W | 3000W | 3500W |
| Battery Voltage | 12/24VDC | 12/24VDC | 24/48VDC | 24/48VDC | 24/48VDC | 48/96VDC |
| Max AC charging current | 0A~20A(Depending on the model, The maximum charging power is 1/4 of the rated power) | | | | | |
| Controller Charging Current | 10A~60A(PWM or MPPT) | | | 24/48V(PWM:10A~60A/MPPT:10A~100A) | | |
| Size(L*W*Hmm) | 340x165x283 | | | 410x200x350 | | |
| Package Size(L*W*Hmm) | 405x230x340(1pc) / 475x415x350(2pcs) | | | 475x265x410 | | |
| N.W.(kg) | 9.5(1pc) | 10.5(1pc) | 11.5(1pc) | 17 | 20.5 | 21.5 |
| G.W.(kg) | 11(1pc) | 12(1pc) | 12.5(1pc) | 19 | 22.5 | 23.5 |
| Installation Method | Tower | | | | | |

| Model: WD/WD-T | 40248/96 | 50248/96 | 60248/96 | 70248/96/192 | 80248/96/192 | 10348/96/192 | 12396/192 |
|---|---|---|---|---|---|---|---|
| Rated Power | 4000W | 5000W | 6000W | 7000W | 8000W | 10KW | 12KW |
| Battery Voltage | 48/96VDC | | | 48/96/192VDC | | | 96/192VDC |
| Max AC charging current | 0A~20A(Depending on the model, The maximum charging power is 1/4 of the rated power) | | | 0A~40A(Depending on the model, The maximum charging power is 1/4 of the rated power) | | | |
| Controller Charging Current | 48V(PWM:10A~120A/MPPT:10A~100A) / 96V(50A/100A(PWM or MPPT)) | | | PWM:(48V:120A; 96V:50A/100A; 192V:50A) MPPT:(48V:100A/200A; 96V:50A/100A; 192V:50A) | | | |
| Size(L*W*Hmm) | 491x260x490 | | | 491x260x490 | | | |
| Package Size(L*W*Hmm) | 545x315x550 | | | 545x315x550 | | | |
| N.W.(kg) | 29 | 30 | 31.5 | 36 | 66 | 70 | 77 |
| G.W.(kg) | 32 | 33 | 34.5 | 39 | 77 | 81 | 88 |
| Installation Method | Tower | | | | | | |

| Model: WD/WD-T | 153192 | 203192 | 253240 | 303240 | 403384 |
|---|---|---|---|---|---|
| Rated Power | 15KW | 20KW | 25KW | 30KW | 40KW |
| Battery Voltage | 192VDC | 192VDC | 240VDC | 240VDC | 384VDC |
| Max AC charging current | 0A~20A(Depending on the model, The maximum charging power is 1/4 of the rated power) | | | | |
| Controller Charging Current | 50A/100A | | | | |
| Size(L*W*Hmm) | 593x370x820 | | | 721x400x1002 | |
| Package Size(L*W*Hmm) | 656x420x937 | | | 775x465x1120 | |
| N.W.(kg) | 110 | 116 | 123 | 167 | 192 |
| G.W.(kg) | 124 | 130 | 137 | 190 | 215 |
| Installation Method | Tower | | | | |

| Input | DC Input Voltage Range | 10.5-15VDC(Single battery voltage) |
|---|---|---|
| | AC Input Voltage Range | 73VAC~138VAC(110VAC)/83VAC~148VAC(120VAC)/145VAC~275VAC(220VAC)/ 155VAC~285VAC(230VAC)/165VAC~295VAC(240VAC)(700W~7000W) 92VAC~128VAC(110VAC)/102VAC~138VAC(120VAC)/185VAC~255VAC(220VAC)/ 195VAC~265VAC(230VAC)/205VAC~275VAC(240VAC)/(8KW~40KW) |
| | AC Input Frequency Range | 45Hz~55Hz(50Hz) / 55Hz~65Hz(60Hz) |
| | AC charging method | Three-stage (constant current, constant voltage, floating charge) |

| Output | Efficiency(Battery Mode) | ≥85% |
|---|---|---|
| | Output Voltage(Battery Mode) | 110VAC±2% / 120VAC±2% / 220VAC±2% / 230VAC±2% / 240VAC±2% |
| | Output Frequency(Battery Mode) | 50/60Hz±1% |
| | Output Wave(Battery Mode) | Pure Sine Wave |
| | Efficiency(AC Mode) | >99% |
| | Output Voltage(AC Mode) | Follow input |
| | Output Frequency(AC Mode) | Tracking Automatically |
| | Output waveform distortion (Battery Mode) | ≤3%(Linear load) |
| | No load loss(Battery Mode) | ≤1% rated power |
| | No load loss(AC Mode) | ≤2% rated power(charger does not work in AC mode) |
| | No load loss(Energy saving Mode) | ≤10W |
| Battery Type | VRLA Battery | Charge Voltage :14.2V; Float Voltage:13.8V(Single battery voltage) |
| Protection | Battery lowvoltage alarm | Factory default: 11V(Single battery voltage) |
| | Battery lowvoltage protection | Factory default: 10.5V(Single battery voltage) |
| | Battery overvoltage alarm | Factory default: 15V(Single battery voltage) |
| | Battery overvoltage protection | Factory default: 17V(Single battery voltage) |
| | Battery overvoltage recovery voltage | Factory default: 14.5V(Single battery voltage) |
| | Overload power protection | Automatic protection (battery mode), circuit breaker or insurance (AC mode) |
| | Inverter output short circuit protection | Automatic protection (battery mode), circuit breaker or insurance (AC mode) |
| | Temperature protection | >90°C(Shut down output) |
| Alarm | A | Normal working condition, buzzer has no alarm sound |
| | B | Buzzer sounds 4 times per second when battery failure, voltage abnormality, overload protection |
| | C | When the machine is turned on for the first time, the buzzer will prompt 5 when the machine is normal |
| Inside Solar controller (Optional) | Charging Mode | MPPT or PWM |
| | PV Input Voltage Range | PWM: 15V-44V(12Vsystem); 30V-44V(24Vsystem); 60V-88V(48Vsystem); 120V-176V(96Vsystem); 240V-352V(192Vsystem); 300V-400V(240Vsystem) ; 480V-704V(384Vsystem) MPPT: 15V-120V(12Vsystem); 30V-120V(24Vsystem); 60V-120V(48Vsystem); 120V-240V(96Vsystem); 240V-360V(192Vsystem); 300V-400V(240Vsystem) ; 480V-640V(384Vsystem) |
| | Max PV Input Voltage(Voc) (At the lowest temperature) | PWM: 50V(12V/24V system); 100V(48V system); 200V(96V system); 400V(192V system); 500V(240V system); 750V(384V system) MPPT: 150V(12V/24V/48V system); 300V(96V system); 450V(192V system); 500V(240V system) ;750V(384V system) |
| | PV Array Maximum Power | 12V system: 140W(10A)/280W(20A)/420W(30A)/560W(40A)/700W(50A)/840W(60A)/ 1120W(80A)/1400W(100A); 24V system: 280W(10A)/560W(20A)/840W(30A)/1120W(40A)/1400W(50A)/1680W(60A)/ 2240W(80A)/2800W(100A); 48V system: 560W(10A)/1120W(20A)/1680W(30A)/2240W(40A)/2800W(50A)/3360W(60A)/ 4480W(80A)/5600W(100A)/6720W(PWM 120A)/5.6KW&11.2KW(MPPT 100A/200A); 96V system: 5.6KW(50A)/11.2KW(100A); 192V system: (PWM:11.2KW(50A)/22.4KW(100A)) / (MPPT:11.2KW(50A)/11.2*2KW(100A)); 240V system: (PWM:14KW(50A)/28KW(100A)) / (MPPT:14KW(50A)/14*2KW(100A)); 384V system: (PWM:22.4KW(50A)/44.8KW(100A)) / (MPPT:22.4KW(50A)/22.4*2KW(100A)) |
| | Standby loss | ≤3W |
| | Maximum Conversion Efficiency | >95% |
| Working Mode | | Mains priority mode/Energy saving mode/Battery(Solar) priority mode |
| Transfer Time | | ≤4ms |
| Display | | LCD |
| Thermal method | | Cooling fan in intelligent control |
| Communication(Optional) | | RS485/APP(WIFI monitoring or GPRS monitoring) |
| Environment | Operating temperature | -10°C~40°C |
| | Storage temperature | -15°C~60°C |
| | Noise | ≤55dB |
| | Elevation | 2000m(More than derating) |
| | Humidity | 0%~95% (No condensation) |

Above parameter revision change without notification.

## 9. Appendix--485 Communication Port

Definition of pin :

| | |
|---|---|
| PIN1--------RS485-A | |
| PIN2--------RS485-B | |
| PIN3--------NC | |
| PIN4--------GND |  |
| PIN5--------NC | |
| PIN6--------NC | |
| PIN7--------NC | |
| PIN8--------NC | |

NC: refer to as not connect.

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