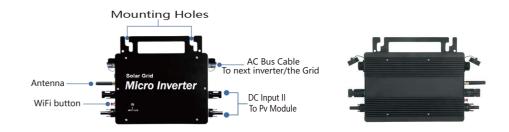


PV Micro inverter

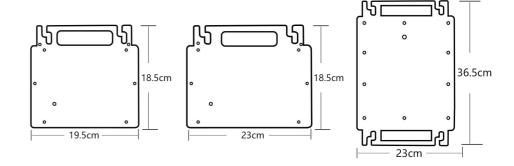
GT300-2800W

- · Single unit connects up to two PV modules
- /Jaximum GT300-2800W AC output powe
- ·Single phase output,Flexible 3-phase PV system
- ·WIFI communication and cloud monitorin
- ·Up to 10 units (230V) per branch
- ·Customizable various input (DC,PV) voltage range
- · Integrated AC bus cable, Ready-To-Use
- ·Low cost, Easy installation

Basic structure



Dimensions



Model	300W/350W/400W	Model	600W/700W/800W
Input Data (DC, PV)		Input Data (DC, PV)	
Number of Input MC4 Connector	1 sets	Number of Input MC4 Connector	2 sets
MPPT Voltage Range	16V-48V	MPPT Voltage Range	22V-48V
Operation Voltage Range	20V-50V	Operation Voltage Range	20V-50V
Maximum Input Voltage	50V	Maximum Input Voltage	50V
Startup Voltage	22V	Startup Voltage	22V
Maximum Input Power	300W 350W 400W	Maximum Input Power	600W 700W 800W
Maximum input Current	12A 14A 16A	Maximum input Current	12A*2 14A*2 16A*2
Output Data(AC)		Output Data(AC)	
Single-Phase Grid Type	120V&230V	Single-Phase Grid Type	120V&230V
Rated Output Power	300W 350W 400W	Rated Output Power	600W 700W 800W
Maximum Output Power	300W 350W 400W	Maximum Output Power	600W 700W 800W
Nominal Output Current	@120VAC:2.5A/@230VAC:1.3A @120VAC:2.9A/@230VAC:1.5A	Nominal Output Current	@120VAC:5A/@230VAC:2.6A @120VAC:5.8A/@230VAC:3A
	@120VAC:3.3A/@230VAC:1.7A		@120VAC:6.6A/@230VAC:3.4A
Nominal Output Voltage	120VAC /230VAC	Nominal Output Voltage	120VAC /230VAC
Default Output Voltage Range	@120VAC:80V-160V /@230VAC:180V-270V	Default Output Voltage Range	@120VAC:80V-160V /@230VAC:180V-270V
Nominal Output Frequency	50Hz / 60Hz	Nominal Output Frequency	50Hz / 60Hz
Default Output Frequency Range	@50Hz:48Hz-51Hz/@60Hz:58Hz-61Hz	Default Output Frequency Range	@50Hz:48Hz-51Hz/@60Hz:58Hz-61Hz
Power Factor	>0.99%	Power Factor	>0.99%
Total Harmonic Distortion	THD <5%	Total Harmonic Distortion	THD <5%
Maximum Units per Branch	@120VAC:5units /@230VAC: 10units	Maximum Units per Branch	@120VAC:3units /@230VAC: 6units
Efficiency		Efficiency	
Peak Efficiency	95%	Peak Efficiency	95%
Nominal MPPT Efficiency	99.5%	Nominal MPPT Efficiency	99.5%
Night Power Consumption	<1w	Night Power Consumption	<1w
Mechanical Data		Mechanical Data	
Operating Ambient Temperature Range	-40°C to +65°C	Operating Ambient Temperature Range	-40°C to +65°C
Storage Temperature Range	-40°C to +85C	Storage Temperature Range	-40°C to +85C
Dimensions(W*H *D)	240mmx185mm x 45mm	Dimensions(W*H *D)	310mmx185mm x 45mm
	(not include connectors and cable)		(not include connectors and cable)
Weight	1.6kg	Weight	2kg
Max Current of AC Bus Cable	20A	Max Current of AC Bus Cable	20A
Waterproof Grade	IP66	Waterproof Grade	IP66
Cooling Mode	Natural Convection- No Fans	Cooling Mode	Natural Convection- No Fans
Other Features		Other Features	
Communication	WIFI(Cloud monitoring)	Communication	WIFI(Cloud monitoring)
Transformer Design	High Frequency Transformers, Galvanically Isolated	Transformer Design	High Frequency Transformers, Galvanically Isolated
Integrated Ground	Equipment ground is provided by the PE in the AC cable. No additional ground is required.	Integrated Ground	Equipment ground is provided by the PE in the AC cable. No additional ground is required.
Protection Functions	Isolated Island Protection, Voltage Protection, Frequency Protection, Temperature Protection, Current Protection, etc.	Protection Functions	Isolated Island Protection, Voltage Protection, Frequency Protection, Temperature Protection, Current Protection, etc.
Design Compliance	EN IEC61000-3-2:2019+A1:2021, EN 61000-3-3:2013+A1:2019+A2:2021, EN IEC55014-2:2021,EN IEC55014-2:2021,	Design Compliance	EN IEC61000-3-2:2019+A1:2021, EN 61000-3-3:2013+A1:2019+A2:2021, EN IEC55014-2:2021,EN IEC55014-2:2021,

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Installation Schematic

Input Data (DC, PV)

Number of Input MC4 Connector	4 sets
MPPT Voltage Range	22V-48V
Operation Voltage Range	20V-50V
Maximum Input Voltage	50V
Startup Voltage	22V
Maximum Input Dawer	1200\\\ 1400\\\ 1600\\\

 Maximum Input Power
 1200W 1400W 1600W

 Maximum input Current
 12A*4 14A*4 16A*4

Output Data(AC)

Single-Phase Grid	з туре	120V&230V	
Rated Output Pov	wer	1200W 1400W 1600W	
Maximum Outpu	t Power	1200W 1400W 1600W	
Nominal Output	Current	@120VAC:10A/@230VAC:5.2A	
		@120VAC:11.6A/@230VAC:6A	
		@120VAC:13A/@230VAC:6.9A	

Nominal Output Voltage 120VAC /230VAC

Default Output Voltage Range @120VAC:80V-160V /@230VAC:180V-270V

Nominal Output Frequency 50Hz / 60Hz

@50Hz:48Hz-51Hz/@60Hz:58Hz-61Hz

Power Factor >0.99%
Total Harmonic Distortion THD <5%

Default Output Frequency Range

Operating Ambient Temperature Range

Maximum Units per Branch @120VAC:2units /@230VAC: 3units

Efficiency

Peak Efficiency 95%
Nominal MPPT Efficiency 99.5%
Night Power Consumption <1w

Mechanical Data

Design Compliance

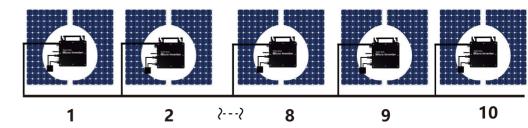
Storage Temperature Range	-40°C to +85C
Dimensions(W*H *D)	230mmx365mm x 45mm
	(not include connectors and cable)
Weight	3.5kg
Max Current of AC Bus Cable	30A
Waterproof Grade	IP66
Cooling Mode	Natural Convection- No Fans

-40°C to +65°C

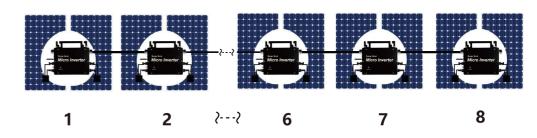
Cooling Mode	Natural Convection- No Fans	
Other Features		
Communication	WIFI(Cloud monitoring)	
Transformer Design	High Frequency Transformers, Galvanically Isolated	
Integrated Ground	Equipment ground is provided by the PE in the AC cable. No additional ground is required.	
Protection Functions	Isolated Island Protection,Voltage Protection, Frequency Protection, Temperature Protection,Current Protection, etc.	
Desires Consultance	EN IEC61000-3-2:2019+A1:2021,	

EN 61000-3-3:2013+A1:2019+A2:2021, EN IEC55014-2:2021,EN IEC55014-2:2021,

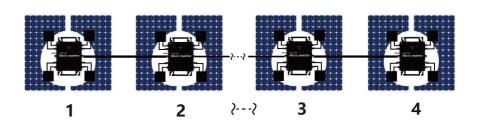
Single phase connection method of micro inverter



- 1.@Single-Phase 230V gridMaximum 10 units 400W Microinverters per branch.
- 2.The max DC input power of each inverter is 400W(the PV module max output power is 1x400W)
- 3. The VOC of PV modules should not be greater than the max DC input voltage of Microinverters.



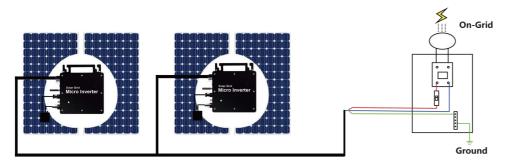
- 1. @Single-Phase 230V gridMaximum 8 units 600W Microinverters per branch.
- 2.The max DC input power of each inverter is 600W(the PV module max output power is 2x300W)
- 3. The VOC of PV modules should not be greater than the max DC input voltage of Microinverters.



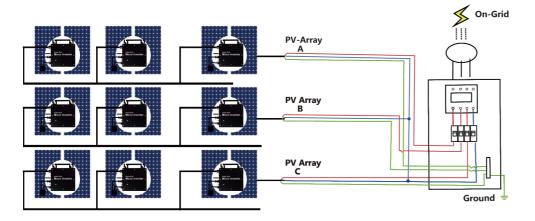
- 1.@Single-Phase 230V gridMaximum 4 units 1600W Microinverters per branch.
- 2.The max DC input power of each inverter is 1600W(the PV module max output power is 4x400W)
- 3. The VOC of PV modules should not be greater than the max DC input voltage of Microinverters.

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Single phase connection method of micro inverter

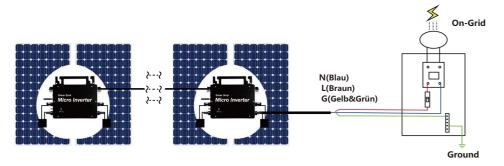


Three phase connection method of 400W micro inverter

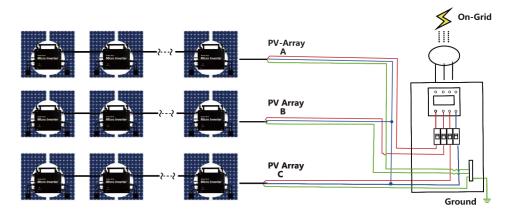


Wiring Schematic

Single phase connection method of micro inverter

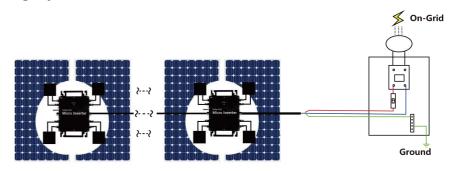


Three phase connection method of 600W micro inverter

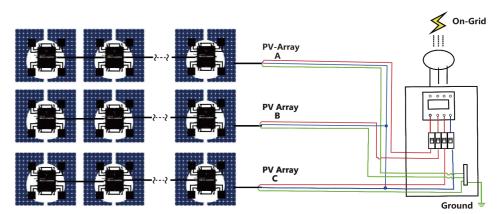


Wiring Schematic

Single phase connection method of micro inverter



Three phase connection method of 1600W micro inverter



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Micro Inverter 350/400/600/800/1200/1400/1600 WIFI Cloud Monitoring User Manual



READ ME FIRST

** User manual subject to change without notice**

·Note that there is a risk of electric shock when connecting the micro-inverter!

·The micro-inverter heats up during operation! Protect yourself accordingly from burns!

·Before configuring WiFi cloud monitoring, please correctly install the micro inverterand make it work normally

·Asmart device(smartphone or tablet) with Bluetooth function and Android or IS system

and a wireless network devicee.g.wireless routerthat can provide WiFi and Internet service must be available

·To configure WLAN cloud monitoring, first switch on the Bluetooth function of the smart device.

·Make sure that your smart device uses the same WiFi network as the micro inverter to be configured and that

it can connect to wireless network devices and access the Internet in the same location of the micro inverter

Make sure that the distance between the wireless network device and the micro-inverter does not exceed 20 m.

and that there are no or few obstacles

Hardware Description



WIFI Status LED Display

- The blue light flashes after always on = the WiFi cloud monitoring module is waiting for configuration.
- The blue light off after always on = the WiFi cloud monitoring module starts and enters the normal working state.
- The blue light flashes = the network is not configured or the network cannot connect to the wireless network device, or the micro inverter has been deleted in the cloud.
- No light = WiFi cloud monitoring is working normally.

Preparation Before Configuration And Use

1. Install the micro inverter correctly and make it worknormally to generate power.

2.Download and install the or "Smart Life" app by searching for it in the corresponding

Android or Apple app store.

3.Turn on the Bluetooth function of your smart device



4.Check that your wireless network device (such as wireless router) is working properly

and connected to the Internet.

to connect to the wireless network device. If you can access the Internet normally, follow the instructions for configuration and usage on the next page.











Configuration Steps Of WIFI Cloud Monitoring









Download in mobile application: smartlife or direct code scanning



Register personal account





Add inverter









Further add confirmation information

Make sure the phone is in Bluetooth on or WiFi status



Enter your home WIFI account information password



Click Next to install and modify the name and account freely



The interface can control the system switch normally. The connection is successful



The connection is successful, and the green light of the inverter is always on in normal operation. Occasionally flashing instrument MPPT is tracking the optimal voltage

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Modify Device Name

- Click the device to be modified in the device list on the home page to enter the device information details page (Figure 5).
- 2. Click the button ∠ in the upper right to enter the device setting page (Figure 6), Continue to click the upper button ∠ to the page of name & position (Figure 7) click name item, then enter a new name and save it (Figure 8).



Remove Device

- Click the device to be deleted in the device list on the home page to enter the device information details page (Figure 5).
- 2. Click the button ∠ in the upper right to enter the device setting page (Figure 6). Click "Remove Device" button below (Figure 9), click the "Disconnect" button toremove the device or click the "Disconnect and wipe data" button to remove the device and clear all data saved by the device in the cloud at the same time.





Share Device With Others

- Click the device to be shared in the device list on the home page to enter the device information details page (Figure 5).
- 2. Click the button in the upper right to enter the device setting page (Figure 6).
- 3. Click the "Share Device" item to enter the device sharing page (Figure 10), click button to enter "Add Sharing" page (Figure 11), and select best sharing way that you think it is most convenient to share the link of micro inverter.

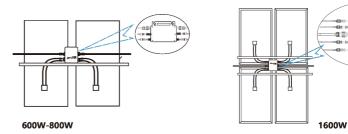




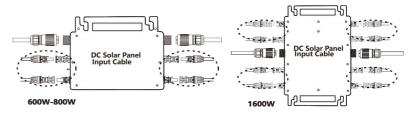
AC-Hauptkabel



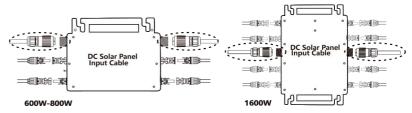
- L-Phasenleiter (Braun)
- G- Schutzleiter (Gelb & Grun)
- N-Nulleiter (Blau)
- 1. The installation process of fixing inverter to PV bracket with mounting screws is as follows:



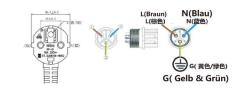
2. Connect the DC of PV to the inverter, and pay attention to distinguish between positive and negative, as shown below:



3. Open the waterproof cover on the AC output side of the micro inverter, and then connect it to the AC. As follows:

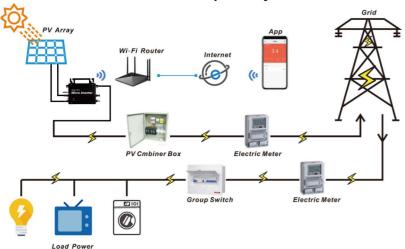


- 4. Repeat steps 1 to 3 to complete the installation of the micro inverter.
- 5. Connect multiple inverters through AC output cables.
- 6. The AC main cable is connected to the power grid.



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Structure of Solar power system



Connection diagram



Normal working conditions of the inverter: the 22-50V DC voltage of the solar panel must be connected, and the AC voltage must be connected at the same time, and the indicator light is green

Only the solar panel is connected. When the mains AC is not connected, the red light on the inverter surface is on, and the instrument and machine do not work normally

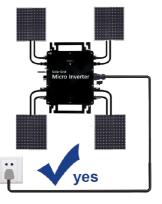




Normal working conditions of the inverter: the 22-50V DC voltage of the solar panel must be connected, and the AC voltage must be connected at the same time, and the indicator light is green

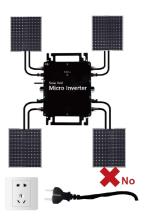
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Normal working conditions of the inverter: the 22-50V DC voltage of the solar panel must be connected, and the AC voltage must be connected at the same time, and the indicator light is green

Only the solar panel is connected. When the mains AC is not connected, the red light on the inverter surface is on, and the instrument and machine do not work normally



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300W/350W/400W

600W/700W/800W



1200W/1400W/1800W/2800W

When the inverter is purchased for the first time and connected to the mobile phone for monitoring, it is only necessary to switch on the mains AC, the blue light beside it flashes, and the inverter can be connected through WIFI or Bluetooth pairing. When the inverter can be controlled through the mobile phone, it is indicated that the connection is normal.

Questions & Answers

1. WHAT TO DO when the Smart-App can't find the micro inverter to be added?

Check the following points:

- Check if the WiFi status indicator of the micro inverter is in the "Blue Flashing" state;
- Check if the Bluetooth function of your smart device is turned on;
- Check if the signal of the wireless network is good.

If all this is the case and the inverter is still not found, press the red reset button for more than 5 seconds to reset. After the WiFi indicator light flashes blue again, use "Smart Life" App to reconfigure the network.

2. WHAT TO DO if I have multiple micro inverters to configure?

Install all micro inverters properly and make them work normally to generate power, and then operate according to the configuration and use steps. The App can search all inverters to be added at one time and configure them at one time.

3. WHAT TO DO if the SSID of my WiFi network or the password is changed?

Please reconfigure the inverter according to the configuration and use steps.

4. WHAT TO DO if the WiFi status indicator of the inverter goes out, but the device displayed on the app is not online?

This means that you can connect to the wireless network device, but you can't connect to the cloud server. It means that your wireless network device can't connect to the Internet. Make sure that your Internet is working properly.

5. The installation site of the inverter is temporarily not equipped with a router and no WiFi signal.

How does App connect the inverter and detect if the inverter is working properly?

You can use an idle smartphone to open the WiFi sharing of mobile phone signal hotspot for connection, and reconfigure the network connection after installing the router.

6. There are multiple WiFi signals on site. Can we connect with different WiFi signals?No, the WiFi connected of the micro inverter and the smart phone must be consistent before the

network can be configured.

7. Can App configure the micro inverter in different places? Can I view data in different places?

You can't configure the micro inverter in different places, but you can view data in different places.

The inverter uploads the latest status data to the cloud server every minute.

8. After checking that there is no problem, the App still cannot find the micro inverter.

Press and hold the inverter red button for more than 5 seconds to reset the inverter.

 $\label{prop:configure} \textbf{After the WiFi indicator flashes again, use App to reconfigure the network.}$

9. WHAT TO DO if I want to monitor the same inverter on two or more smart devices?

You can share the inverter with another phone using the share device feature.

10. Will App data be saved?

Yes, App data will be stored on cloud server. After the network is successfully configured, you can view the data at any time and place.

11. The inverter cannot be connected to the app at night?

At night, because the solar panel does not generate power, the micro inverter does not have any power input, so it will offline and it is impossible to re-configure the network at night.



Read user manual before operating this equipment, because failure could result in serious injuries, property damage and / or electrical shock.

- The inverter ONLY works when it is connected to the grid. If the unit is unplugged, there is nofeed-in. There is no voltage at the output and the indicator light lights up red.
- The maximum voltage and wattage of all connected PV panels must NOT exceed the max.voltage and wattage of the inverter, otherwise the unit will be damaged. Please refer to thetechnical data.
- Before maintenance work, the PV panels and all connections must be disconnected from unit.
- The unit may only be opened by qualified personnel.
- The current generated by the PV modules cannot be switched off. To do this, disconnect thepanels from the inverter. There is a danger of electric shock.
- Do NOT remove the lid. Servicing must be performed by qualified service personnel.
- Protect the inverter from direct sunlight and rain, e.g. by mounting it behind a PV panel.
- Do NOT cover the unit as it may overheat.
- NOTE: Unused connections must always be closed, otherwise water may enter and a shortcircuit may occur.















