

# SMART GRID INVERTER GTB-600 Manual

## Parameter Table

Model	GTB-600	
Minimum input power	500Watt	
Peak power tracking voltage	22-35V	
Min / max starting voltage	22-35V	
Maximum DC input current	20A	
Maximum input operating current	27.5A	
<b>Output Data</b>	<b>@120V</b>	<b>@230V</b>
Peak power output	600Watt	600Watt
Rated output power	600Watt	600Watt
Rated output current	5A	2.6A
Rated voltage range	80-100VAC	180-240VAC
Rated Frequency range	48-51.5Hz-61Hz	48-51.5Hz-61Hz
Power Factor	>99%	
Max watt per branch circuit	100w (Single-phase)	100w (Single-phase)
<b>Output Efficiency</b>	<b>@120V</b>	<b>@230V</b>
Static MPPT efficiency	99.5%	99%
Maximum output efficiency	99%	99%
Nighttime power consumption	<1W	<1W
THD	<5%	<5%
<b>Exterior &amp; Feature</b>		
Ambient temperature range	-40°C to +60°C	
Dimensions (L x W x H)	280mm x 200mm x 40mm	
Weight	1.62kg	
Waterproof rating	IP65	
Cooling	Self-cooling	
Communication Mode	Wi-Fi mode	
Power transmission mode	Reverse transfer, load priority	
Monitoring System	Mobile APP, PC browser	
Electromagnetic Compatibility	EN50181 part1 EN50182 Part1	
Grid authentication	EN61000-3-2 Safety EN61219	
Grid detection	DIN VDE 0126	
Certificate	CE, ENEC	

## Notes:

- ◆Please connect the inverter following the operation instruction show above. If have any question please contact with relative persons.
- ★Non professional do not disassemble. Only qualified personnel may repair this product.
- ◆Please install inverter in the low humidity and well-ventilated place to avoid the inverter over-heating and clear around the inflammable and explosive materials.
- ★When using this product, avoid children touching, playing, to avoid electric shock.
- ◆Connected solar panels, battery or wind generators DC input DC power supply cable.

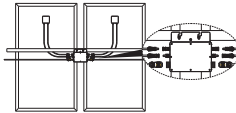
## Accessories for product:

1. One warranty card;
2. One user manual;
3. One certificate of quality;
4. 1 pouch of screw for micro inverter installation;
5. One AC Cable;

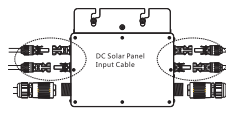
## LED Display

1. Red light 3 second -- Red LED light 3 second while device starts, then in working condition;
  2. Green flash fast -- MPPT searching;
  3. Green flash slow -- MPPT = searching;
  4. Red flash slow -- MPPT - searching;
  5. Green lights on 3s and off 0.5s -- MPPT locked;
  6. Red light steady -- a. Islanding protection; b. Over-temperature protection; c. Over / low AC voltage protection; d. Over / low DC voltage protection; e. Fault Remarks:
- LED flashing in the process of being working condition; inverters connected to AC & DC sides --  
 Red LED light 3 second -- Green LED flash fast (MPPT searching) -- Green LED flash slow (MPPT = searching) / Red LED flash slow (MPPT - searching) / reen LED lights on 3s and off 0.5s (MPPT locked).

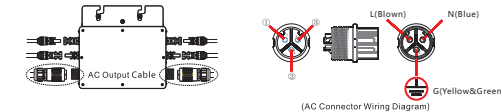
**Step1** Installation for fixed the inverter on the PV holder with the screws attached is as following:



**Step2** Connect the two DC terminal of the PV to the inverter, positive to positive, negative to negative. Show below:



**Step3** Open the waterproof cap on AC output side of the micro inverter, then plug AC power line. Show below:

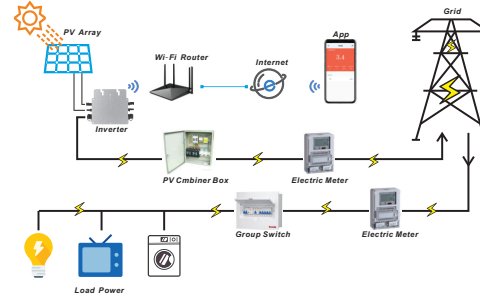


**Step4** Plug the AC output line to main AC cable;

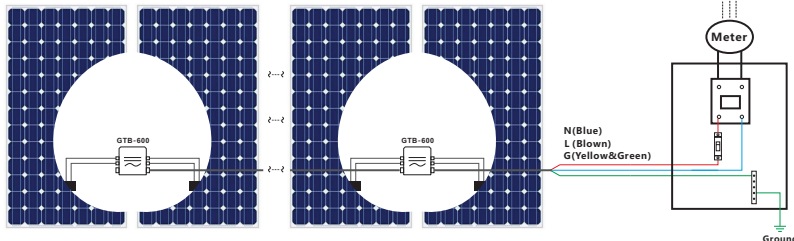
**Step5** Repeat the first step to the third step to complete the installation of micro inverters;

**Step6** Finally, please connect the AC main cable to the utility grid.

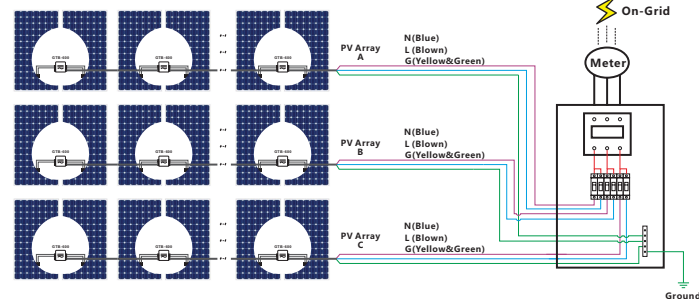
## Structure of Solar power system



## Single-Phase Connection



## Three-Phase Connection



## PV Monitoring System Operating Instructions

1. Download and install the monitoring system APP (support Android and IOS systems)
2. Click Create New User to create an account
3. Click [QR code scan] in the upper right corner to scan [QR code sticker] on the inverter
4. When prompted for the Wi-Fi password at home, please enter the Wi-Fi password;

5. After entering the Wi-Fi password, the system will perform pairing connection (see Figure 5)
6. After the inverter is added correctly, it will show that the inverter is turned on (see Figure 6)
7. If the inverter is not running in the current network, it will show that the inverter is off (see Figure 7)
8. Click on each inverter, you can view the statistics of the inverter



(1)



(2)



(3)



(4)



(5)



(6)



(7)



(8)