




1 Product Overview

GT60-V is a wireless data transmission terminal device based on 2.4G WiFi network, which provides a fully transparent data channel and can realize remote, wireless and networked communication methods conveniently and quickly. Make it easy for your device to connect wirelessly to the Internet.

GT60-V has many advantages such as strong network compatibility, flexible and fast networking, and low operating cost. It can be widely used in power systems, industrial monitoring, traffic management, meteorology, water treatment, environmental monitoring, financial securities, coal mines, petroleum, new energy and other industries.

2 Product appearance

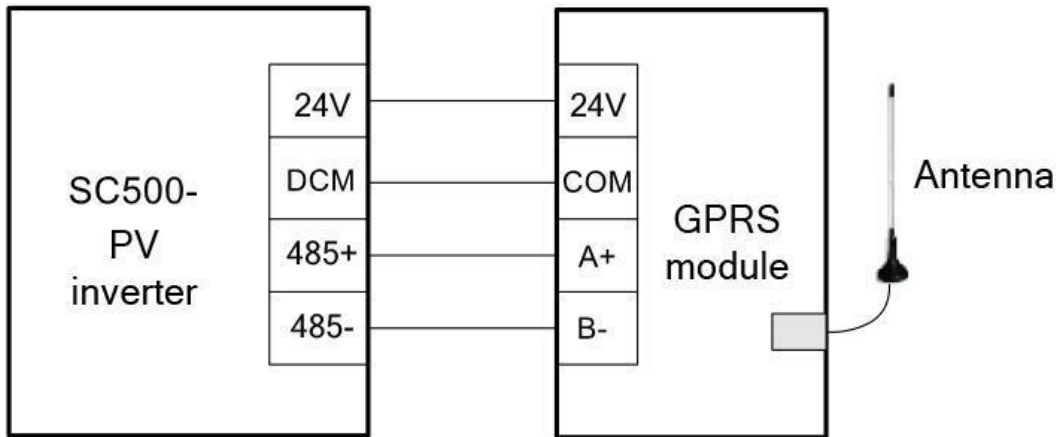
2.1 A complete set of IOT modules, including **IOT card**, **Antenna**, and **Data cable**:

Product Item	Display pictures	Notes
IOT card		
Antenna		Signal reception
Data cable		Connect the inverter and IOT card

2.2 Definition of terminal blocks:

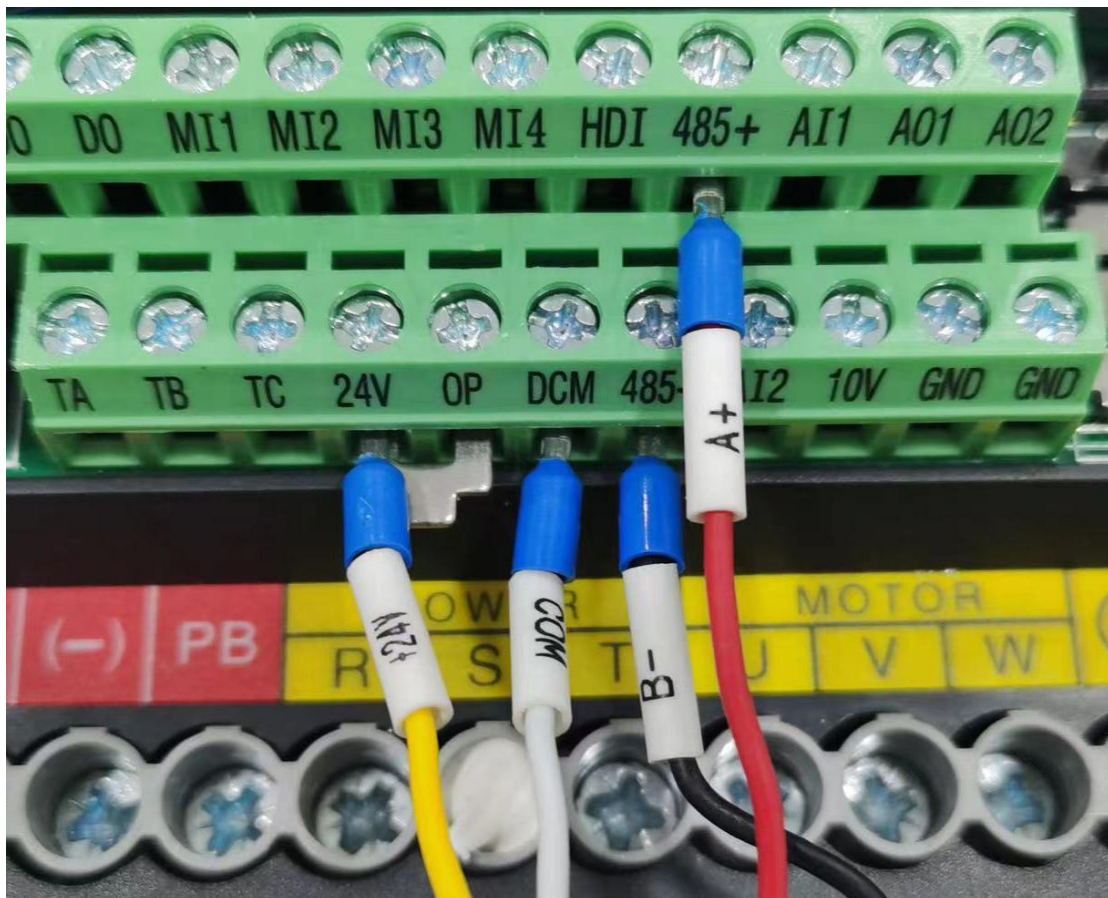
Terminal name	Designation	Notes
24+	Connect the 24V of the Inverter	24VDC
COM	Connect the Inverter DCM	DCM
A+	Connect the RS485+ of the Inverter	485+
B-	Connect the RS485- of the Inverter	485-

- ◆ The solar water pump inverter supports an optional GPRS module to implement remote monitoring, and the GPRS module connects to the inverters through 485 communication. The running state of the inverter can be monitored in real time on the APP in the mobile phone or web page.
- ◆ **Method for connecting the GPRS module to the inverter:**



2.3 Inverter Parameter Settings And wiring.

- ◆ **Set P27.00=3 (Communication Mode)**



3 Technical parameters

3.1 Table Main Parameters of GT60-V Product

Parameter Item	Parameters	Notes
Frequency band	2.4~2.43835GHz Support GB15629.11-2006, IEEE802.11 b/g/e/i/d/k/r/s/w/n	
Wifi encryption method	WPA2	
Transmission rate	2/5.5/11Mbps	
Support network protocol	TCP, UDP	
Antenna interface	50Ω SMA female	
Serial port level type	RS485	
Serial parameters	Baud rate: 1200~115200bps, Data bits: 8, Parity: Odd, Even stop bits: 1	
Power	DC: 9~24V	
Power Consumption	Communication: <60mA@24V Idle: <35mA@24V	
Working temperature	-40~85℃	
Protection class	IP54	
Electromagnetic Compatibility	Electromagnetic Compatibility: Electrostatic Discharge Immunity Test Level 3 Radio Frequency Electromagnetic Field Radiation: Immunity Test Level: Level 3	

4 Product Features

- ◆ Hardware watchdog design to ensure the system is stable and reliable;
- ◆ Comes with a disconnection reconnection mechanism to ensure that the device is permanently online;
- ◆ RS485 built-in 15kV ESD protection;
- ◆ Embedded standard TCP/IP protocol stack, supporting transparent data transmission;
- ◆ Support data center dynamic domain name, fixed IP, fixed domain name network access;
- ◆ Support virtual private network (VPN private network, need to apply to the network operator);
- ◆ Support the automatic collection function of Modbus registers, which can collect up to 128 registers at a time;
- ◆ Support local and remote graphical interface parameter configuration and maintenance;
- ◆ Support up to 8 custom time period start-stop settings, users can use this function to set the start-stop time period of the corresponding equipment;

5 Antenna Instructions

Please screw the matching 2.4G WiFi antenna to the metal thread on the left side of the product. This product is a wireless communication product. When using the wireless communication function, it must be used with an antenna.

6 Frequently Asked Questions

6.1. After power on, the indicator light does not flash or light up.

Answer: Check whether the positive and negative of the power supply voltage are reversed, and whether there is a virtual connection between the input voltage 24V and GND.

6.2. After 5 minutes of power-on, the Net light remains constant, and the platform and app show that the device is not online.

Answer:

- 1)** If the SIM card is not installed properly, power off and reinstall to ensure good contact (the SIM card must be installed under the condition of power off and clearing);
- 2)** Move the GT89-V antenna to a place with good signal;
- 3)** Query whether the SIM card is activated and whether there is any remaining balance;
- 4)** For use in mainland China, if the IoT card is inserted, please confirm whether the SIM card has the machine card binding function, and whether the corresponding card is bound to other machines;
- 5)** When using abroad, please confirm whether the SIM has disabled functions such as PIN code or PUK code.

6.3. The data uploaded on the web page does not match.

Answer: Check whether the connected device matches the device type set on the platform, and contact the manufacturer.

6.4. The device is online normally, but cannot be started and stopped, and data collection cannot be performed.

Answer:

- 1)** Check whether the communication lines A and B of the modbus terminal equipment and the adapter 485 are reversed or disconnected;
- 2)** Check whether the serial port parameter of the connected machine is 9600bps, 8N1.

7 IOT module software download

Support Android and Apple version of mobile phone, scan QR code and download with the browser of mobile phone.



Notes:

- ◆ When GPRS and inverter terminals are connected, pay attention to the 24V short connector. If it is loose, it cannot supply power to the IOT module.
- ◆ After the IOT module is correctly connected, the red LED of the IOT module flashes once every 3 seconds, indicating that the communication has been successful.
- ◆ If the red light is on for a long time, it means that the communication is not successful, and need to check the phone card.

8 Mobile phone distribution network process

Users can scan the QR code on the homepage to download the exclusive app. After registering an account, they can set the home router information into the GT60-V according to the home routing information, and let the GT60-V successfully connect to the home router. Access the cloud platform.

