



Bluetooth WL-BT

User manual

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1 User Manual Information

1.1 Copyright Statement

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Copyright No. is G1.0. Growatt reserved the final right of interpretation of this manual. The product parameters, appearances and packages are subject to change without notice. Readers are cautioned, however, that Growatt reserves the right to make changes without notice and shall not be responsible for any damages, including indirect, incidental or consequential damages, caused by reliance on the material presented.

1.2 About Manual

Distinguished users, thank you very much for your trust in our Bluetooth Module product, which is developed and manufactured by our R&D department. We sincerely hope it can satisfy your need, also, we're glad to receive your suggestions on improving our product. The target of the manual is to provide the detailed product information, installation, operation and maintenance.

1.3 Target Group

The user manual is applied for technicians and common users to operate and maintain the Bluetooth Module. The readers should be acquainted with some computer network knowledge and operating skill.

1.4 Guideline

Before using the Bluetooth Module, please read the manual carefully. In the meantime, please keep it well, lest maintenance staff may not find it later. All the content, pictures, logos, symbols are reserved. No part of this document may be transmitted in any form without the prior written permission of our internal staff. The content of manual could be changed. Every attempt has been made to make this document complete, accurate and up-to-date. If there are any differences between the contents of the instruction and the product, please regard the actual one as the truth. You can download the newest version from our website www.growatt.com.

1.5 FCC Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

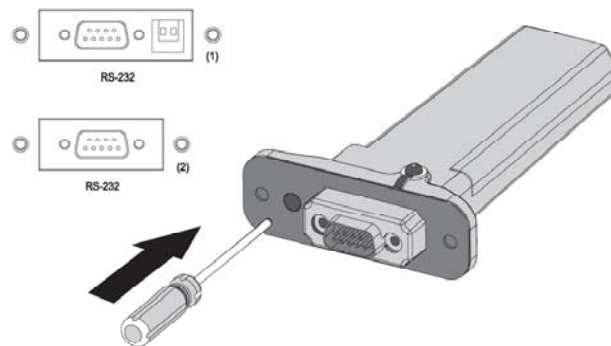
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

RF Exposure Statement

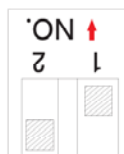
To maintain compliance with FCC's RF Exposure guidelines, this equipment should be installed and operated with minimum distance 20cm between the radiator and your body: Use only the supplied antenna.

2 Installation of the Bluetooth Module

The RS232 port of Growatt inverter has two specifications.



1. If the RS232 port is compliant with the specification (1), please turn on the DIP switch, then plug the Bluetooth Module to the inverter directly via the RS232 and lock screw.

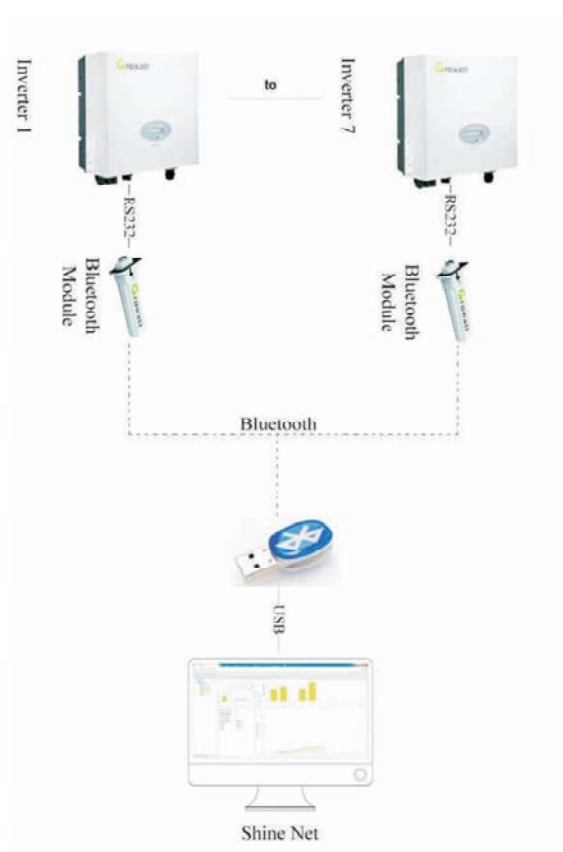


2. If the RS232 port is compliant with the specification (2), please pry open the rubber plug in the waterproof cushion, then plug the Bluetooth Module to the inverter and lock screw.

3 Description

Bluetooth Module is a wireless device used to monitor inverter. Connect the bluetooth adapter to the PC (the bluetooth adapter is not necessary if the PC has already owned bluetooth capability), and insert the bluetooth Module to the inverter. The communication could be set up via ShineNet which is a monitoring software.

One bluetooth adapter could couple with 7 bluetooth modules at most. The inverter address should be set within the range of 1 to 7.



Note:

1. Bluetooth adapters can be classified as CLASS A and CLASS B, the maximum communication range of the CLASS A is 10m, and the maximum communication range of the CLASS B is 100m. Normally, the built-in bluetooth adapter of the laptop belongs to CLASS A. If the communication range is beyond 10m, please adopt the CLASS B adapter.

2. The default PIN code of bluetooth Module is 1234, if you would like to modify it, please contact Growatt.

4 Communication between Bluetooth and Shine Net

4.1. Installation of Shine Net

Double click ShineNet installer, and follow the prompts to finish the installation.

4.2 Logging

After installation, a shortcut icon of the ShineNet will set up on the desktop. Double click the shortcut icon, and a new small icon of the ShineNet will appear in the bottom right corner of the desktop.



Right click the small icon, and select the "Start server". After a while, the prompt information will pop up.

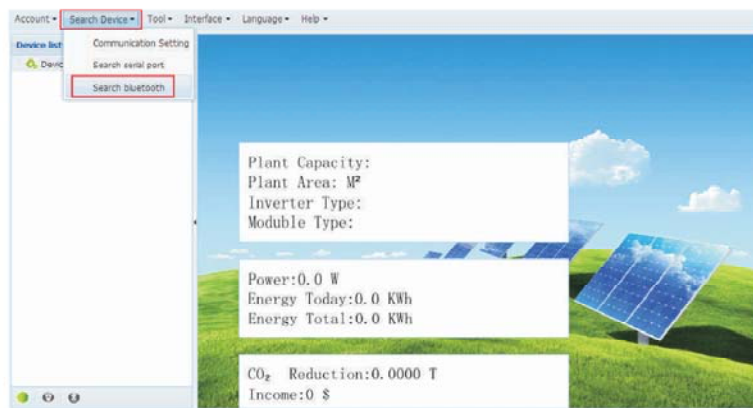


Right click the small icon, and select the "Open Interface", then ShineNet interface will emerge. (Another way to open the interface: start the web browser and enter the `http://127.0.0.1:5678` in the address bar).

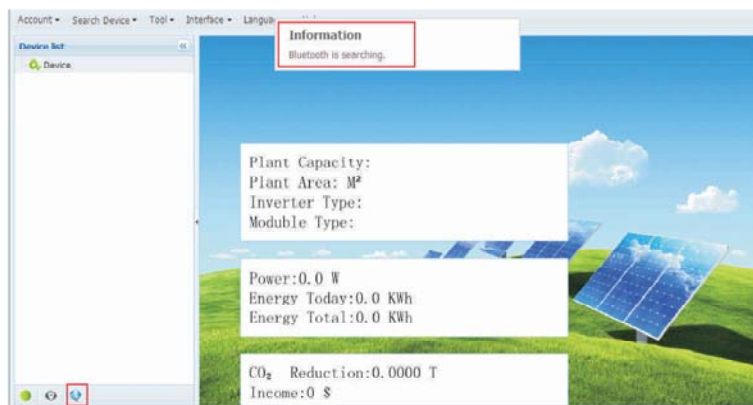
The default user name of ShineNet is admin, and the password is 123456.

4.3 Starting the ShineNet Monitoring

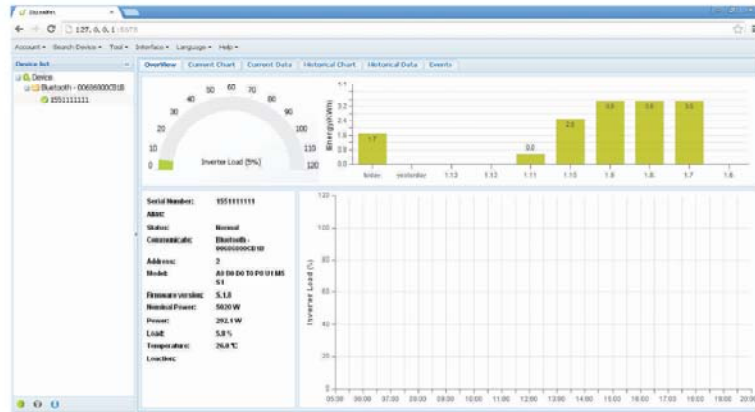
Click on "Search Device" → "Search Bluetooth".



Shine Net is searching inverters.



After searching, ShineNet could monitor inverter status if bluetooth communication is OK.



Note:

1. Owing to the difference of the bluetooth driven protocols, ShineNet might not find the bluetooth module once in a while. You can solve this problem by installing the official bluetooth driven program of the corresponding laptop manufacturer. For instance, only after installing the official driven program, the built-in bluetooth adapter of the HP (Hewlett Packard) or Toshiba laptops would run normally.
2. As to detailed information, please refer to ShineNet User Manual.

5 Technical Data

Wireless parameters

Certificate	FCC/CE
Frequency range	2402~2480MHz;
Transmit power	+20dBm(Max.)
Receiving sensitivity	-91dBm

Hardware parameters

Data interface	UART: 1200bps - 230400bps
Operating voltage	9V(+/-5%)
Operating current	0mA ~ 170mA
Operating temperature	-40℃ - 80℃
Storage temperature	-45℃ - 150℃
Dimensions	135mm×79mm×29mm

Software parameters

Network type	Bluetooth 2.1
Security mechanism	AES
Default PIN code	1234

6 Contact

If you have technical problems concerning our products, please contact Growatt.

Growatt New Energy Technology Co., Ltd

Building B, Jiayu Industrial Zone, #28 Guanghui Road, Longteng Community,
Shiyan, Baoan District, Shenzhen, P.R.China.

+86 755 27471942

service@ginverter.com

www.growatt.com