RD400D-TB User Manual



Chengdu Ebyte Electronic Technology Co.,Ltd.

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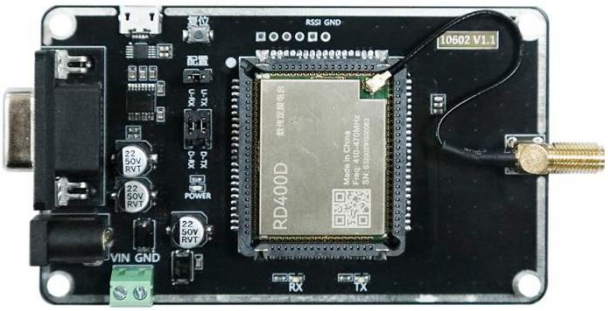
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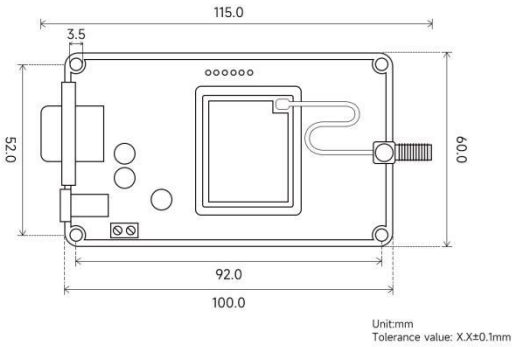
1. Overview



1. Used for testing and developing Chengdu Yibaiite RD400D wireless transmission module, RD400D-TB contains RD400D module, refer to RD400D module user manual for detailed use, manual download link: https://www.ebyte.com/downpdf.aspx?id=2024
2.RD400D wireless digital transmission module all IOs have been led out.
3. With CH340X USB to serial chip, you can use USB interface for serial communication development.
4. With WS3232 RS232 to serial chip, you can use RS232 interface for serial communication development.
5. Users need to access external DC power supply and serial port for secondary development.
6. Stable operation, easy to develop.

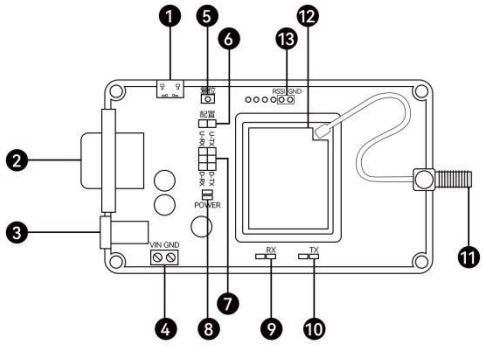
2. Instructions for use

Product Size:



Hardware Description:

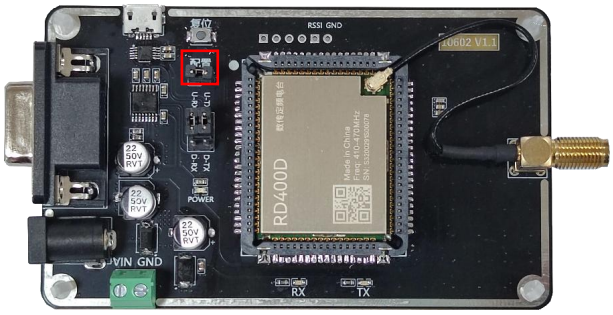
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①	Micro USB interface	②	RS232 interface
③	DC interface, 5~24V DC power supply interface	④	Wiring terminal, 5~24V DC power supply interface
⑤	Reset button	⑥	Mode selection port
⑦	Communication interface selection port	⑧	Power Indicator
⑨	Data reception indicator	⑩	Data transmission indicator
⑪	SMA-K antenna port	⑫	Module installation location
⑬	Signal strength indicator port		

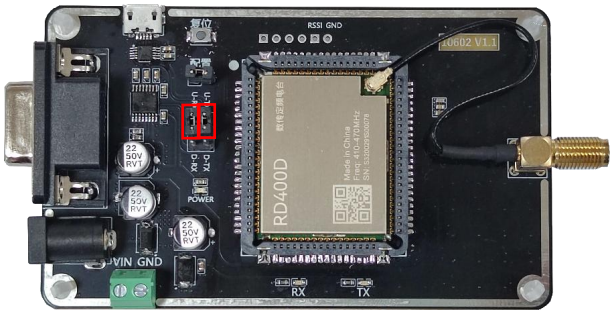
Function description:

1. Micro USB interface: can be directly connected to the computer USB port for communication
2. RS232 interface: can be directly connected to the standard RS232 interface for communication
3. DC interface, 5~24V DC power supply interface
4. Terminal block, 5~24V DC power supply interface
5. Mode selection port: when the jumper cap is inserted, the module is in configuration mode; when the jumper cap is not inserted, the module is in digital transmission mode.



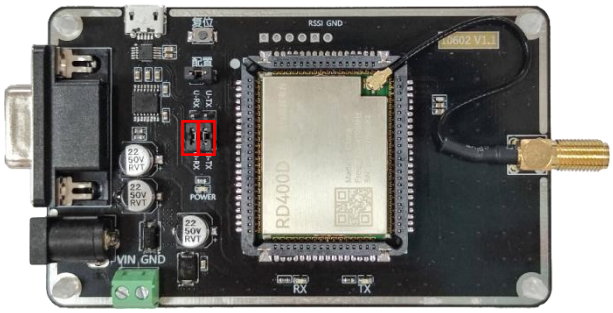
6. Communication interface selection port

Insert the jumper cap (vertical plug) above the communication interface selection port, and then select the Micro USB interface for communication.

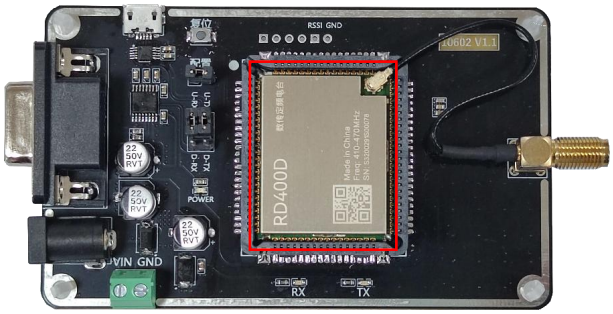


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Communication interface selection port below insert jumper cap (vertical plug), at this time select RS232 interface for communication.



7. Module installation position



3. Driver Installation

The CH340X chip is used as the serial port, please download and use the driver software provided by our company; after installation, the serial port number can be recognized in the device manager.

4. Technical Support

If you have any questions during the development process, please contact our technical support, we only support our modules, excluding the basic usage of microcontroller issues.

5. Networking instructions

Two RD400D-TB test kits are used. For the convenience of description, RD400D-TB test kit 1 is named module (radio) A and RD400D-TB test kit 2 is named module (radio) B. For details, please check the RD400D module user's manual.

Caution:

① The module (radio) only supports half-duplex communication, i.e. the two modules cannot transmit data simultaneously;

② The module (radio) must work in digital transmission mode;

Note: After the module (radio) is turned on, the following message "into boot" will be output, if you do not receive this message, you need to check whether the serial port is connected correctly.

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5.1 Hardware Connection

Please prepare micro USB cable, antenna, and power adapter to connect to RD400D-TB test kit and open the corresponding serial port.

5.2 Module (radio) parameter configuration

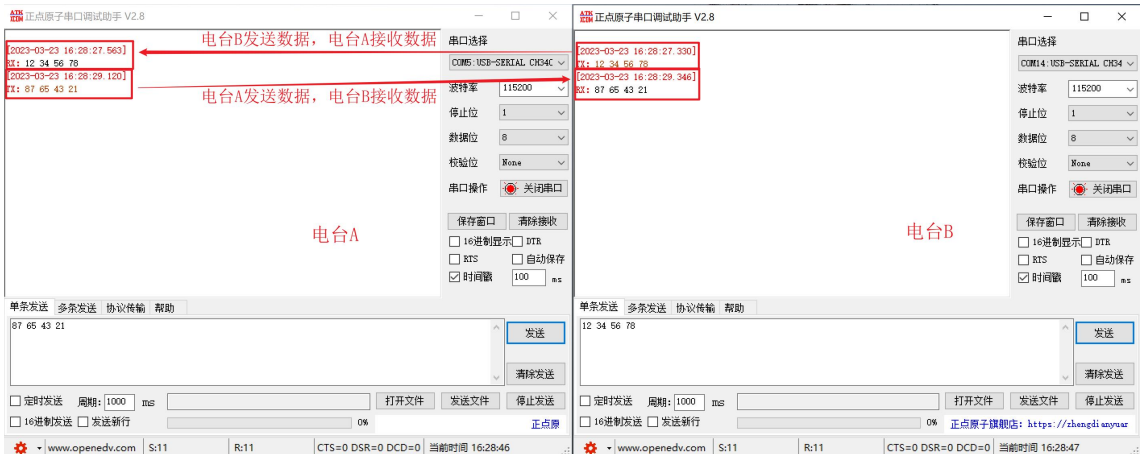
When configuring the parameters, the mode selection port jumper cap needs to be plugged in, at this time the module is in configuration mode, the user can send operation commands to configure the module parameters, please refer to the RD400D user manual for specific configuration parameters.

Configure the module (radio) A and module (radio) B parameters in the same way as the following table:

Module	Communication Protocol	Emission frequency	Receiving frequency	Air Baud Rate	Power Mode	Serial port baud rate
Module (Radio) A	TRIMTALK	463.125	463.125	9600	L	115200
Module (Radio) B	TRIMTALK	463.125	463.125	9600	L	115200

5.3 Communication Testing

The communication mode of module (radio) A and module (radio) B is configured as digital transmission mode (mode selection port jumper cap removed), module (radio) A and module (radio) B are connected to the serial debugging assistant, module (radio) A and module (radio) B send data to each other, and the data reception of module (radio) A and module (radio) B can be seen as follows:



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6. Revision History

Versions	Revision Date	Revision Notes	Maintaining people
1.0	2023-6-19	Initial Version	Bin

About us

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