

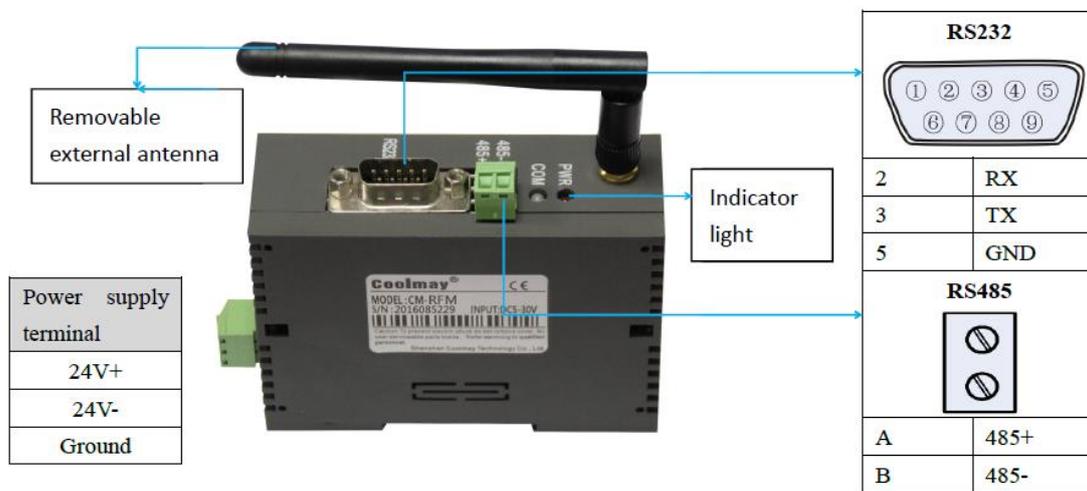
CM-RFM Testing

I. Introduction

- **Tool:** CM-RFM setting software

Please download it on the website: www.coolmay.com.

- **Product appearance:**



- **The indicator status and functions are shown as the table below.**

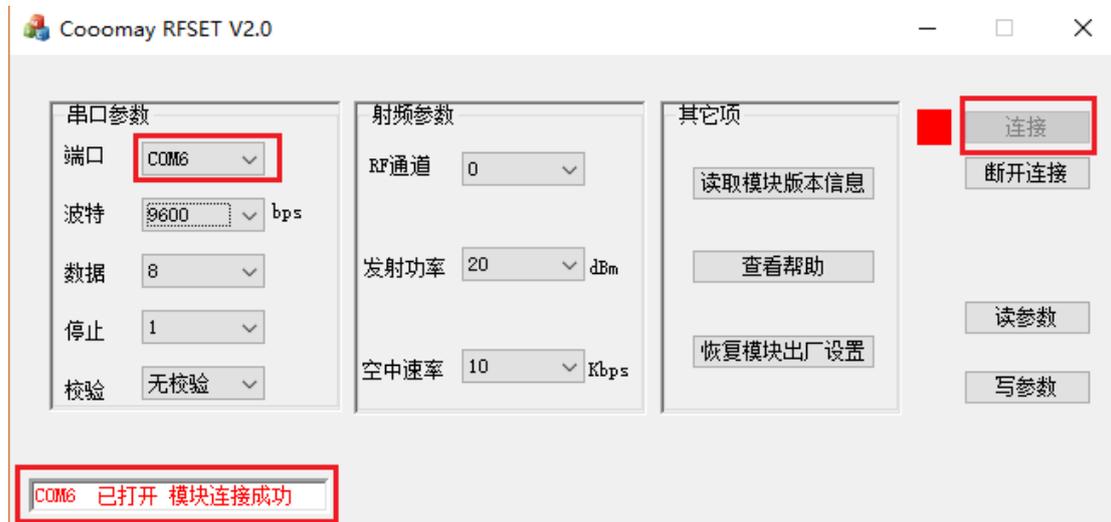
Indicator light	Function	Status
PWR	Power indicator light	Always on when the power is working normally
COM	Communication indicator light	When there is data transmission between the module and PLC, the light flashes. When the RS485 communication line is

		connected reversely, the light will always be on and alarm.
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II. Parameter settings

Note: When using the CM-RFM module to communicate between the computer and the PLC, two modules are required, one is connected to the computer and the other is connected to the PLC.

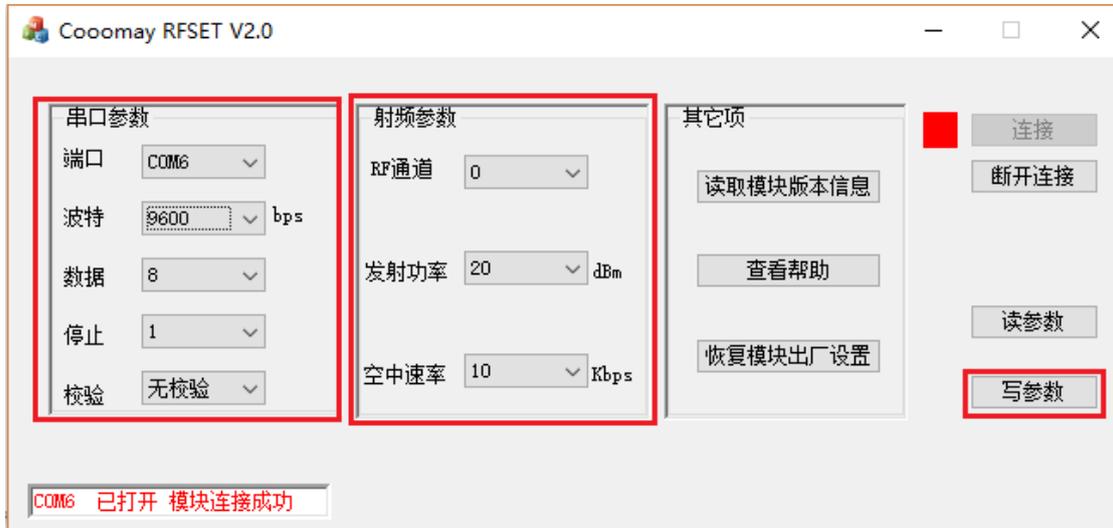
1. Install the antenna on the module.
2. Connect the computer and the module with RS232 or RS485 communication cable.
3. Connect the DC24V power supply to the module, and check whether the power indicator PWR is always on, which means it is correct.
4. Open the RFM module parameter setting software. Select the correct serial port and click the [Connect] button, as shown in the figure below:



As shown in the figure above, if the serial port is successfully connected, it will prompt the "串口 已打开 模块连接成功" (Serial port is open and the module is successfully connected).

5. Set the serial port parameters and radio frequency parameters, as shown

in the figure below, click the [写参数(write parameters)] button after the settings are completed.



- The parameter is successfully written and the following dialog box pops up:



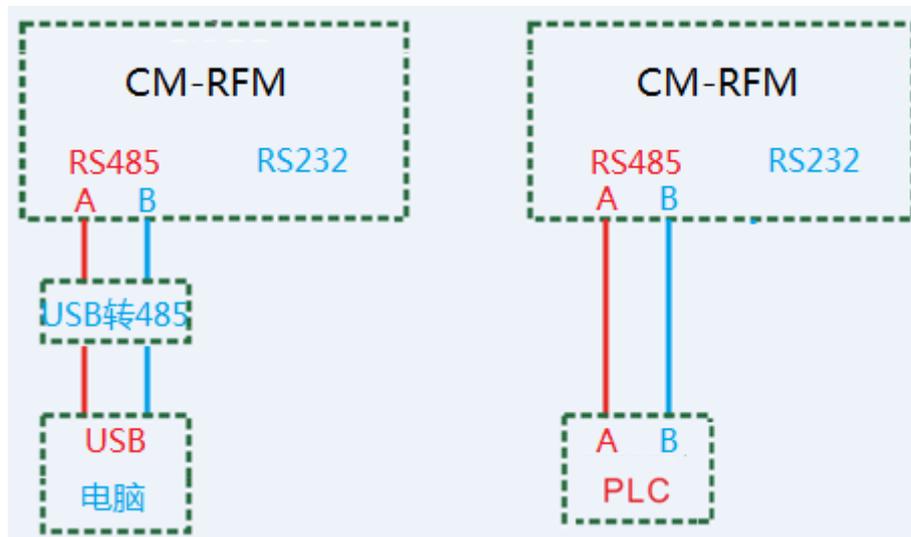
- Click 【确定(OK)】.

- Use the same steps to set the parameters of another RFM module.

Note: Serial communication and parameter settings may be unsuccessful. If unsuccessful, please check whether the corresponding line is connected correctly. The computer system is recommended to use WIN8 and below. WIN10 may not be able to connect and communicate normally.

- After completing the settings, click the [断开连接(Disconnect)] button to disconnect the occupied serial port (this serial port is required for subsequent communication with the PLC).

III. Schematic diagram of connection between module and PLC and computer via RS485



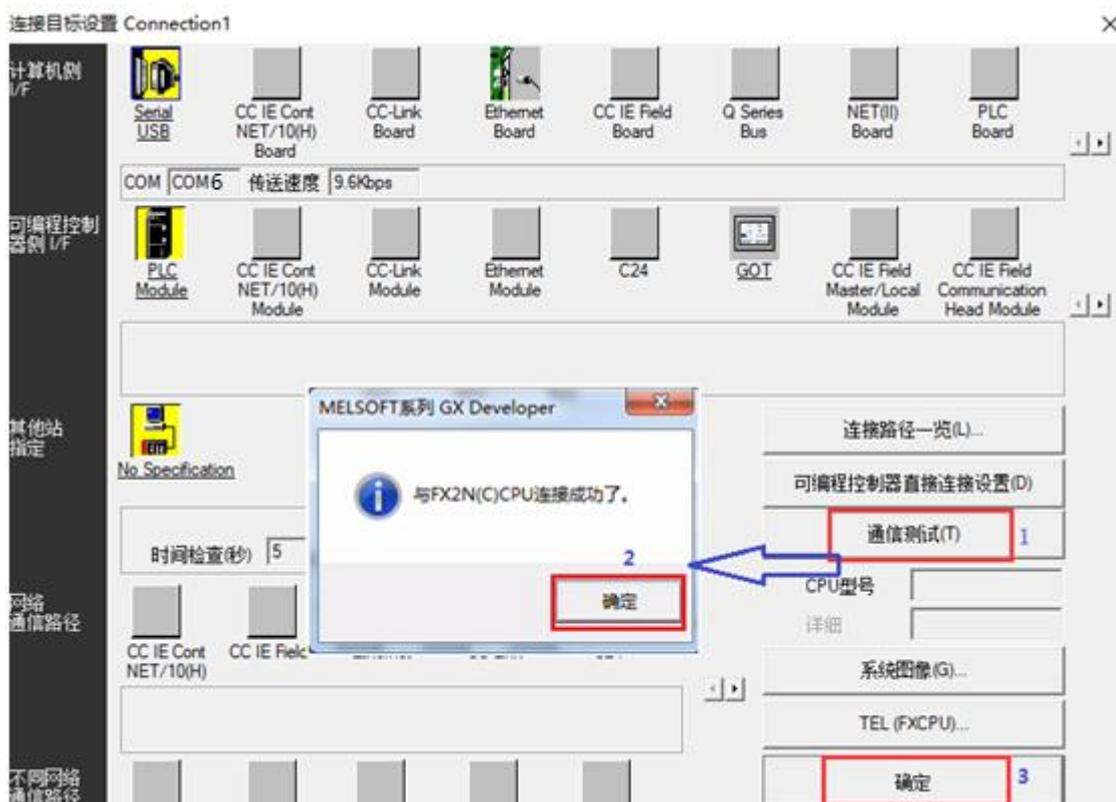
Note: Don't forget to power up the module and PLC.

IV. Download or monitor PLC program through CM-RFM module

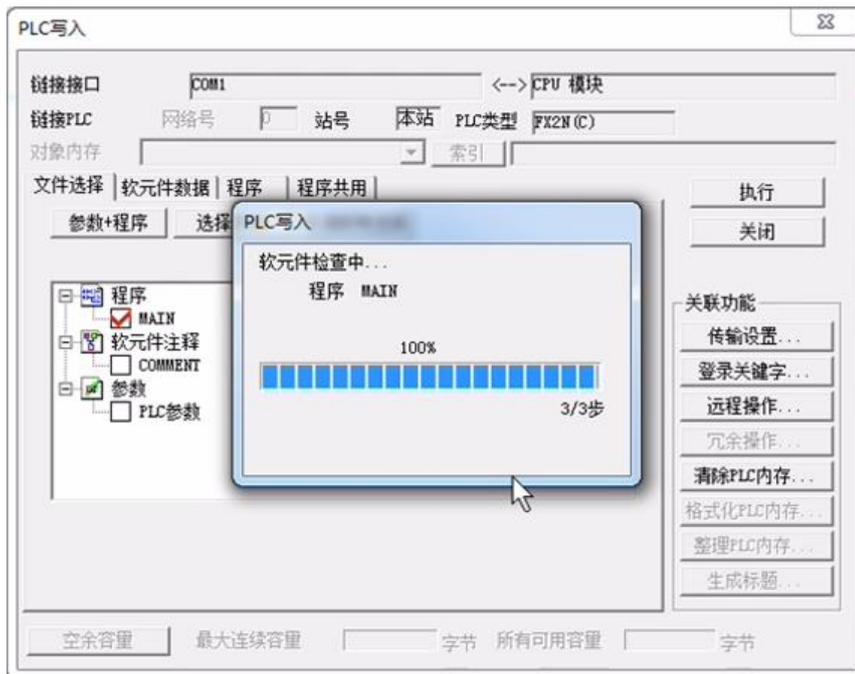
1. Connect a module to the computer via RS485.
2. Connect another module to the PLC via RS485. (Take Coolmay 2NPLC as an example here)
3. Use GX Develop8.52 PLC software to create or open a FX2NC project.
4. Open the transmission settings and connect the computer and PLC. The serial port here uses the serial port COM6 for communication between the above modules and the computer (Subject to the actual serial port used), click the [确定(OK)] button after selection, shown as below:



- Click the [通信测试(Communication Test)] button, the following dialog box will pop up to indicate that the communication is successful, and finally click the [确定(OK)] button to close the communication setting dialog box. During communication, check the COM light of the module, this light flashes.



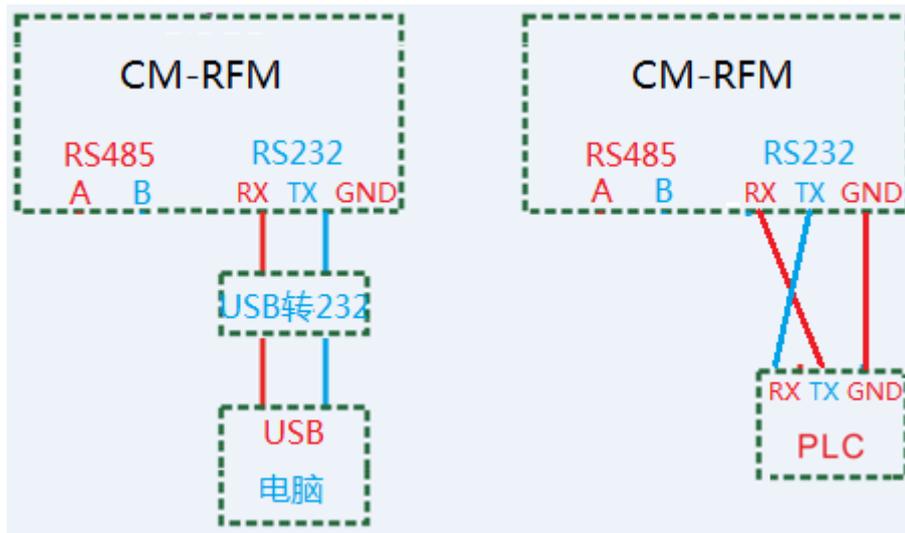
- Write a simple program such as LD M0 OUT Y0, and write the program to the PLC. During the writing process, the COM indicator will flash normally. A screenshot of the writing process is as follows:



7. After the program is written, you can click the monitor button  to monitor the PLC program. Correct monitoring means that the communication between the module and the PLC is normal.

V. RS232 monitoring PLC program

The operation steps are the same as RS485 monitoring PLC program. But the module communicates with PLC through RS232. The connection diagram is as follows:



VI. Other connections

