DTECH

USB to RS485 serial port pin module

Please read the product manual carefully before using the product.

I. Product Description

The function of the USB to TTL module is to convert the level to a signal that can be recognized by both parties for communication. The level logic of the microcontroller communication interface is different from that of the PC communication interface. The communication interface on the PC has a USB interface, and the corresponding power level The level logic follows the USB principle. The serial communication on the microcontroller passes through the four pins of RXD, TXD, VCC and GND of the microcontroller. The corresponding level logic follows the TTL principle. The USB to TTL serial port module is a very practical tool that can test the UART serial port communication of the module and download programs to the microcontroller through the UART interface of the microcontroller. The serial port assistant software on the computer can very intuitively display the data returned by the serial port device and send the corresponding control data to the serial port device.

II. Specifications

1. A USB to TTL serial port communication module, suitable for microcontrollers and download line products.

2. Full-speed USB device interface design, compatible with USB V2.0/V1.1.

3. TTL communication baud rate reaches 12Mbps, transmission speed is fast and stable, and full-duplex communication mode.

4. The product has TTL3.3V and TTL5V level selection interfaces, and supports the access of handshake signals RTS and CTS. The communication is more stable and supports output voltages of 3.3V and 5V for easy use.

5. The pin header design is used to facilitate the access and use of DuPont cable, and it has a signal indicator light for sending and receiving signals to control the communication status.

6. Circuit integrated ESD protection: ±20KV IEC1000-4-2 air gap discharge, ±15KV IEC1000-4-2 contact discharge.

7. The product is used for microcontroller program burning, chip communication information printing and other occasions, and is used by electronic engineers for debugging.

8. Support Win xp/Win7 and above/Mac 10.15 and above/Linux operating system.

III. Interface Description

Number	Ports and other definitions	Illustrate
1	RS485_A	RS485 signal data transmission
2	RS485_B	RS485 signal data reception
3	GND	Signal reference ground/power output ground
4	5V	Power output 5V
5	3.3V	Power output 3.3V
6	GND	Signal reference ground/power output ground
7	GND	Signal reference ground/power output ground

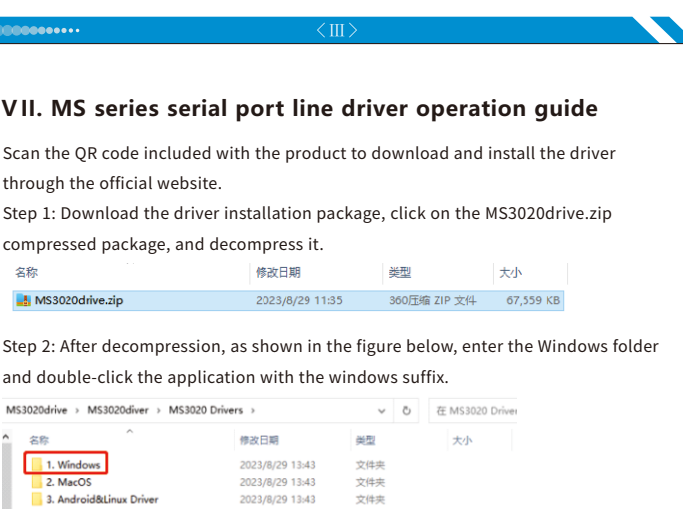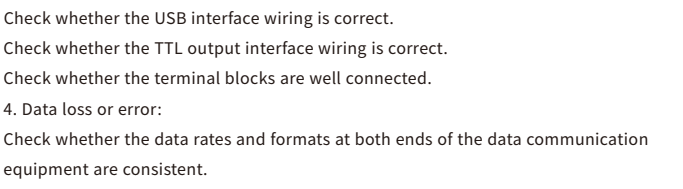## IV. Schematic Diagram Of Product Connection

V. Product Accessories

1. Product 1pcs
2. Dupont line 1pcs

VI. Troubleshooting

1. A "question mark" or "exclamation mark" will appear after the serial port (COM): This means the driver was not installed correctly. Please delete the project and install it.

2. Even if the driver is installed successfully, the device cannot work:

If the adapter is installed on COM5, reassign it to COM1, 2, 3 or 4. It is possible that the computer only scans a limited number of COM ports (e.g. 3 or 4) and therefore the computer does not recognize the COM5 port with this limitation until the COM port is reassigned.

3. Data communication failed:

Check whether the USB interface wiring is correct.

Check whether the TTL output interface wiring is correct.

Check whether the terminal blocks are well connected.

4. Data loss or error:

Check whether the data rates and formats at both ends of the data communication equipment are consistent.
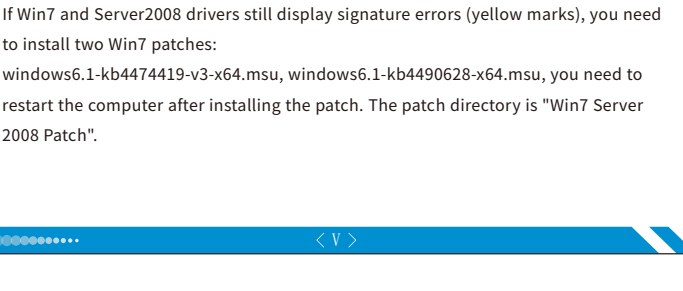
VII. MS series serial port line driver operation guide

Scan the QR code included with the product to download and install the driver through the official website.
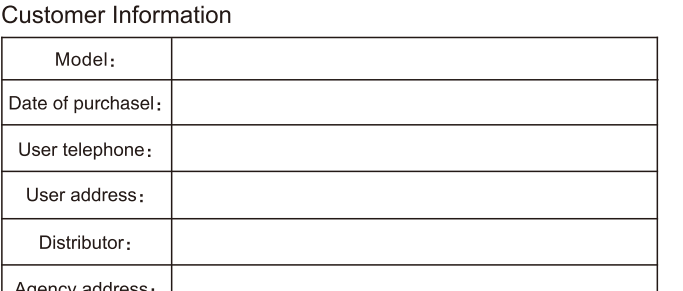
Step 1: Download the driver installation package, click on the MS3020drive.zip compressed package, and decompress it.
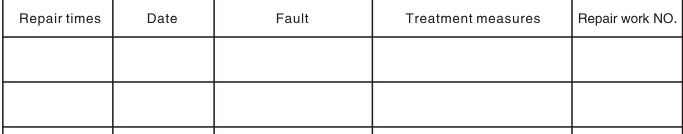

Step 2: After decompression, as shown in the figure below, enter the Windows folder and double-click the application with the windows suffix.

Step 3: The installation dialog box pops up, click Next and Install until completed.

Step 4: After the installation process is completed, click Finish in the dialog box to end the installation.

Step 5: Connect the product device to the computer and check whether the port number is displayed in the device manager.

> Monitors
> Network adapters
> Ports (COM & LPT)
>   MacroSilicon USB Serial Ports (COM4)
>   MacroSilicon USB Serial Ports (COM5)

Win7/Windows Server 2008 installation precautions

Win7 or Windows Server 2008 will pop up an unverifiable driver on some models. You need to manually click "Install this driver software anyway", as shown in the following figure:

Windows can't verify the publisher of this driver software

→ Don't install this driver software
You should check your manufacturer's website for updated driver software for your device.

→ Install this driver software anyway
Only install driver software obtained from your manufacturer's website or disc. Unsigned software from other sources may harm your computer or steal information.

∨ See details

If Win7 and Server2008 drivers still display signature errors (yellow marks), you need to install two Win7 patches:

windows6.1-kb4474419-v3-x64.msu, windows6.1-kb4490628-x64.msu, you need to restart the computer after installing the patch. The patch directory is "Win7 Server 2008 Patch".

Product Warranty Card

Customer Information

Model:	
Date of purchase:	
User telephone:	
User address:	
Distributor:	
Agency address:	
User telephone:	Dealer stamp valid

Intenance Records

Repair times	Date	Fault	Treatment measures	Repair work NO.