USB TO RS485

Features

- USB to RS485 communication
- Adopt original FT232RL, fast communicating, stable and reliable, better compatibility
- Onboard TVS (Transient Voltage Suppressor), effectively suppress surge voltage and transient spike voltage in the circuit, lightning-proof & anti-electrostatic
- Onboard self-recovery fuse and protection diodes, ensures the current/voltage stable outputs, provides over-current/over-voltage proof, improves shock resistance
- 3x LEDs for indicating the power and transceiver status
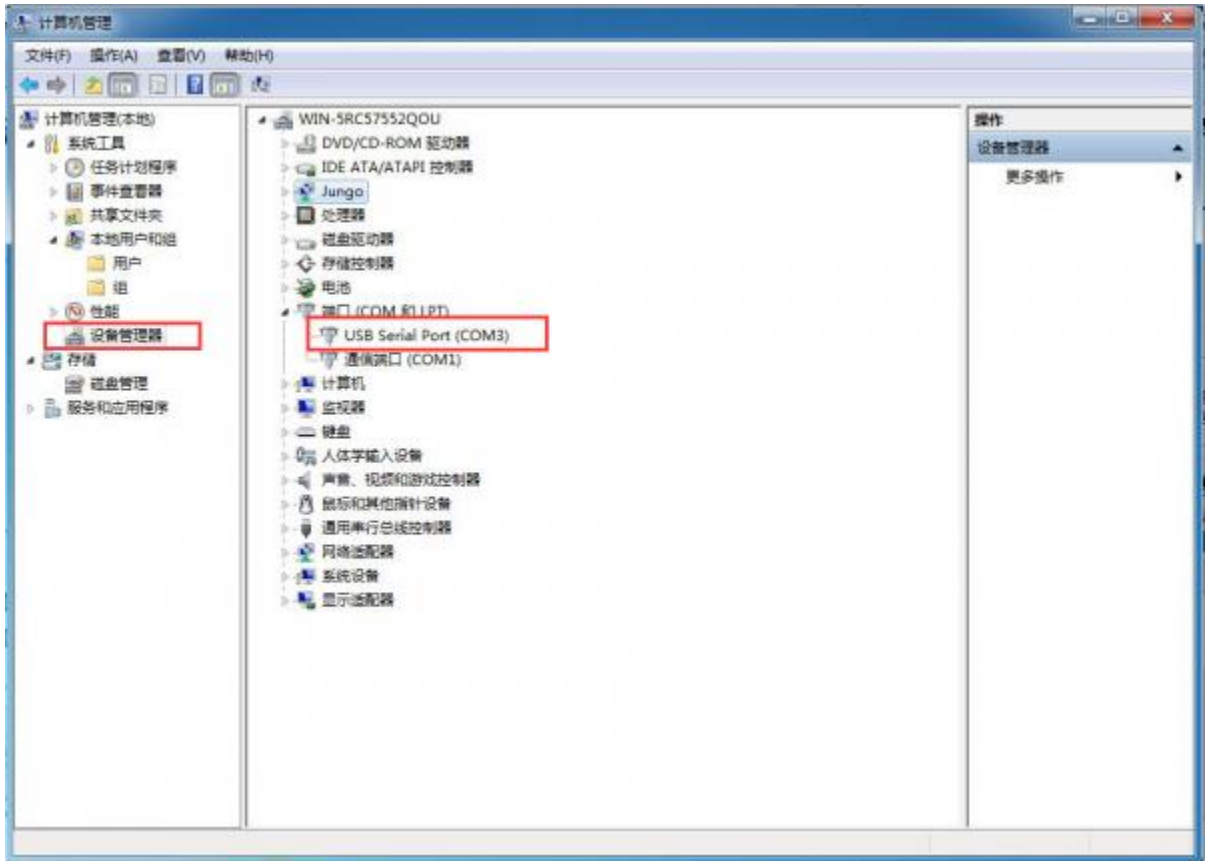
Specification

- Product type: industrial converter
- Baudrate: 300-921600bps
- Host port: USB
- Device port: RS485
- USB:
  - Operating voltage: 5V
  - Connector: USB-A
  - Protection: 200mA self-recovery fuse, ESD protection
  - Transmission distance: about 5m

- RS485:

  - Connector: screw terminal

  - Pins: A+, B-, GND

  - Direction control: hardware automatic control

  - Protection: 600W lightning-proof and surge-suppress, 15KV ESD protection (onboard 120R balancing resistor)

  - Transmission distance: about 1200m (low rate)

  - Transmission mode: point-to-multipoints (up to 32 nodes, it is recommended to use repeaters for 16 nodes or more)

- LED indicators:

  - PWR: red power indicator, light up when there is USB connection and voltage is detected

  - TXD: red TX indicator, light up when the USB port sends data

  - RXD: red RX indicator, light up when the device ports send data back

- Operating environment:

  - Temperature: -15℃ ~ 70℃

  - Humidity: 5%RH ~ 95%RH

- Operating system: Mac, Linux, Android, WinCE, Windows 10 / 8.1 / 8 / 7 / XP

User guide

Driver installation

- Connect the module to host PC, check Device Manager, if the device is listed with the yellow exclamation mark, it means that the driver was not installed.

- Download the driver form #Resources, unzip, and install it.

- After installing, you can find that the mark disappeared and a COM device is listed
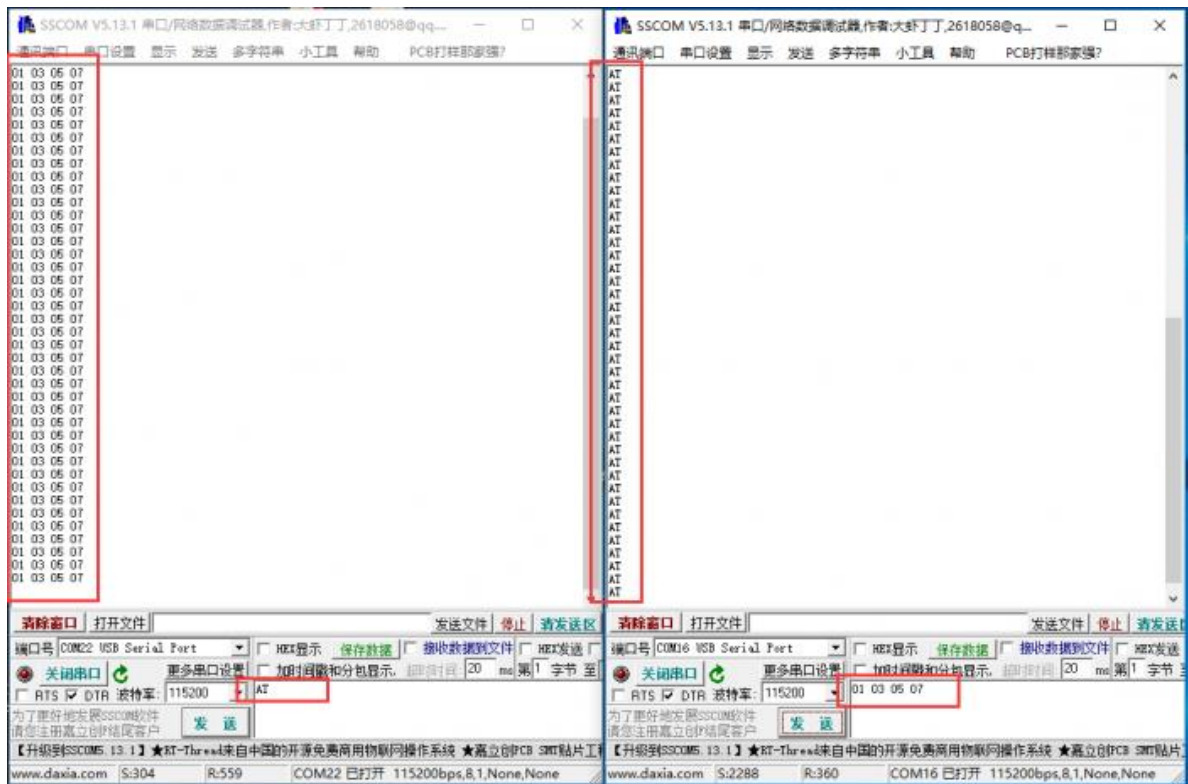

Testing

RS485

- You should prepare two RS485 device

- Connect A+ to A+, B- to B-, and connect them to host PC.

Run SSCOM software to test.

- Expected result:

Resources

- [Driver](#)

- [Driver from FTDI website](#)

- [SSCOM software](#)

- [FT232R datasheet](#)

- [SP481E_SP485E SP485 datasheet](#)

FAQ

Question: Can't be used on non-windows system, how to solve it?

Answer:

If you encounter a system other than Windows that cannot be used normally, you can go to the official website link below, install the corresponding system driver and use it: https://www.ftdichip.cn/Drivers/D2XX.htm

Question: Does it support Linux systems?

Answer:

Multi-system compatibility, support Win7/8/8.1/10, Mac, Linux, Android, WinCE and other systems.

Question: What should I do if the RS485 short-range communication is abnormal?

Answer:

Remove the 120 ohm termination matching resistor from RS485.

Question: Does it support USB to RS232, RS485 and TTL at the same time?

Answer:

No support, only USB to one of the three, USB to RS232, RS485 or TTL.

Question: Does it support RS232, RS485 and TTL interchange?

Answer:

No, RS232, RS485 and TTL cannot be converted to each other, but USB to RS232, RS485 or TTL is supported.