# Introduction

This is an industrial USB to RS485 converter with original FT232RL inside. It features embedded protection circuits such as lightning-proof, resettable fuse, ESD protection, and TVS diode, etc. It's pretty small in size.

### 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
- 3 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°C ~ 70°C
  - 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

