



**USB to RS232 485
TTL armor serial cable**

Please read the product manual carefully before using the product

USB 2.0 to TTL/ RS 232/RS 485 multifunctional serial cable

I. Overview

With the continuous development of the PC industry , various large peripheral interfaces (such as DB9 serial port interfaces) of old-fashioned PCs are gradually being canceled , but many important devices in industrial environments use RS485 interfaces to achieve data communication , so many users need Use the USB to TTL/ RS 232/ 485 converter to realize the data transmission between PC and TTL/ RS 232/ 485 devices.

This universal USB2.0 to TTL / RS 232/ 485 converter does not require an external power supply, is compatible with USB2.0 , TTL / RS 232/ 485 standards , and can convert single-ended USB signals to TTL/ RS 232/ 485 signals, Provide surge protection power of 600W per line, and the surge voltage generated on the line due to various reasons, and the extremely small inter-electrode capacitance ensures the high-speed transmission of the TTL/ RS 232/ 485 interface. The TTL/ RS 232/ 485 port is connected through the DB9 header connector connection. The converter has zero-delay automatic transmission and reception conversion inside the converter, and the unique I/O circuit automatically controls the direction of data flow .

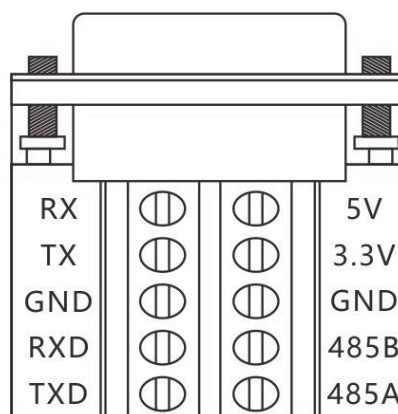
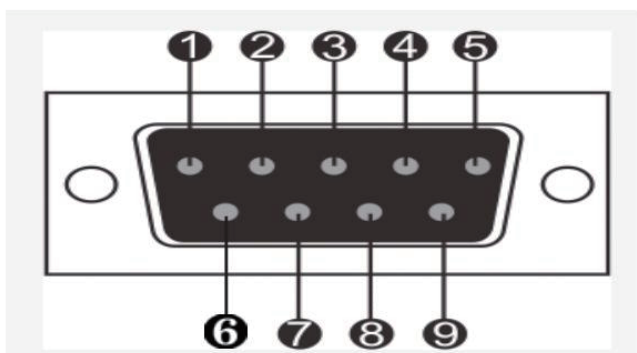
The USB to TTL/ RS 232/ 485 converter can provide reliable connection for point-to-point and point-to-multipoint communication, RS485 point-to-multipoint each converter can connect up to 256 RS485 devices, TTL/ RS485 communication speed 300 bps to 3 Mbps , RS232 communication rate 300 bps to 115200 bps . Products are widely used in industrial automation control systems, access control systems, attendance systems, card swiping systems, building automation systems, power systems, and data acquisition systems .

2. Product parameters

- 1) Full-speed USB device interface, compatible with USB V2.0/V1.1;
- 2) Imported FTDI original chip, standard serial port protocol;
- 3) RS232 supports baud rate 300~460800bps;
- 4) RS485 supports baud rate 300~3000000bps;
- 5) TTL supports baud rate 300~3000000bps;

- 6) Isolation voltage DC/AC 5000Vrms;
- 7) Support data bits: 7, 8, stop bits: 1, 2, parity bits: Even, None, Odd, Mark, Space;
- 8) Circuit integrated ESD protection: $\pm 20\text{KV}$ IEC1000-4-2 air gap discharge;
 $\pm 15\text{KV}$ IEC1000-4-2 contact discharge;
- 9) RS485 surge protection 600W; RS232/TTL surge protection 350W;
- 10) Support Windows/Mac/Linux/Windows ce operating system;

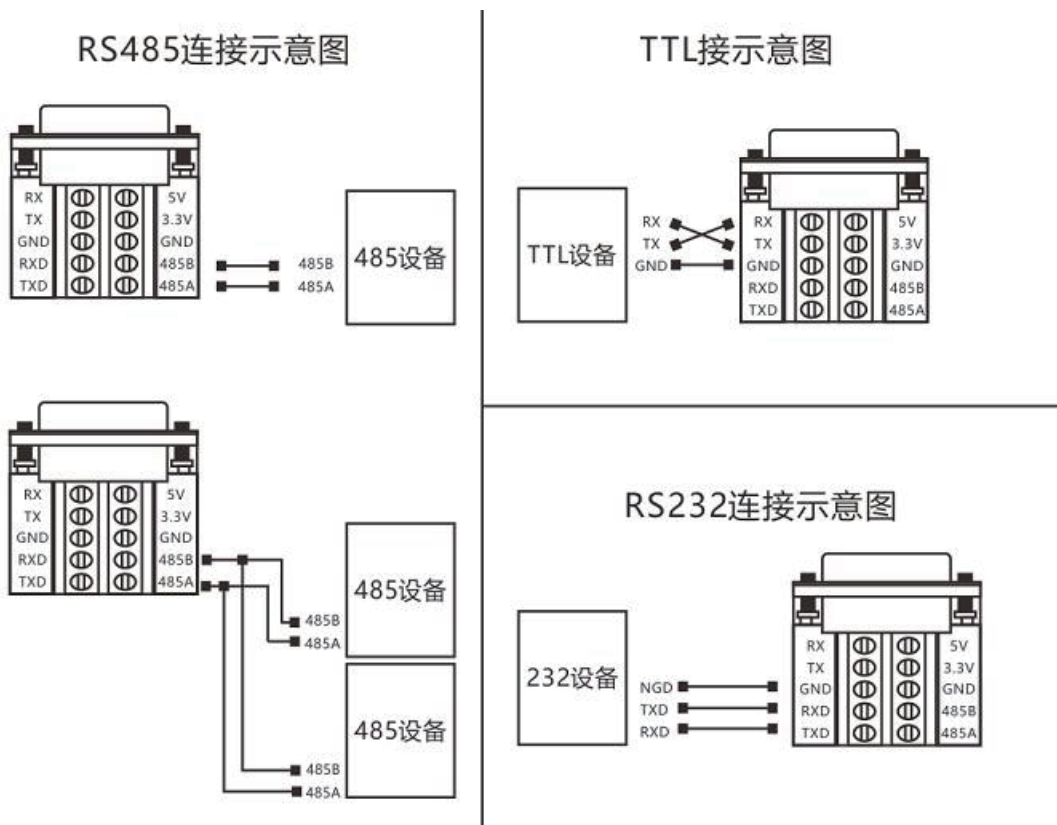
三、 pin definition



DB9 male pin definition				
pin	definition		pin	definition
①	TTL-RX		6	RS485-A
②	RS232-RXD		⑦	RS485-B
③	RS232-TXD		⑧	DC 3.3V
④	TTL-TX		⑨	DC 5V
⑤	GND			
Terminal pin definition				
Location	definition		Location	definition

RX	TTL-RX communication interface	5V	DC5V power supply positive output
TX	TTL-TX communication interface	3.3V	DC3.3V power supply positive output
GND	Signal/Power Ground	GND	Signal/Power Ground
RXD	RS232-RXD Communication Interface	485B	RS485-communication interface
TXD	RS232-TXD Communication Interface	485A	RS485+ communication interface

4. Schematic diagram of product communication connection



5. Packaging and accessories

1. Product 1
2. Terminal 1

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.