

CONVERTISSEUR MULTI-BUS ISOLÉ INDUSTRIEL COMMUNICATION USB/RS232/RS485/TTL

Communication between different buses



Features At A Glance

The **USB/RS232/RS485/TTL Converter** is an industrial grade isolated converter that supports **USB / RS232 / TTL to RS232 / 485 / TTL**, with built-in power supply isolation, digital isolation, and protection circuits like TVS diode. It is easy to use and suitable for industrial control equipments and/or applications with high communication requirement.

- Adopts original FT232RL for USB communication, fast communicating, stable and reliable, better compatibility
- Onboard over-voltage, over-current protection circuits (there's no protection between the two power supplies of the host terminal)
- Onboard unibody power supply isolation, providing stable isolated voltage, no extra power supply required for the isolated terminal

- Onboard unibody digital isolation, for isolating the signal, reliable and jamproof, low power consumption
- Onboard TVS (Transient Voltage Suppressor), effectively suppress surge voltage and transient spike voltage in the circuit, lightningproof & anti-electrostatic
- Onboard resettable fuse and protection diodes, ensures the current/voltage stable outputs, provides over-current/over-voltage proof, improves shock resistance
- Onboard TTL serial port 3.3V and 5V voltage level switch, allows the user to select TTL level of the Group B terminal
- Aluminium alloy enclosure with oxidation dull-polish surface, solid and durable



Specifications

PRODUCT TYPE	Industrial Isolated Multi-bus USB/RS232/RS485/TTL Converter
DATA RATE	300 ~ 921600bps 300 ~ 600000bps (RS232 to RS232)

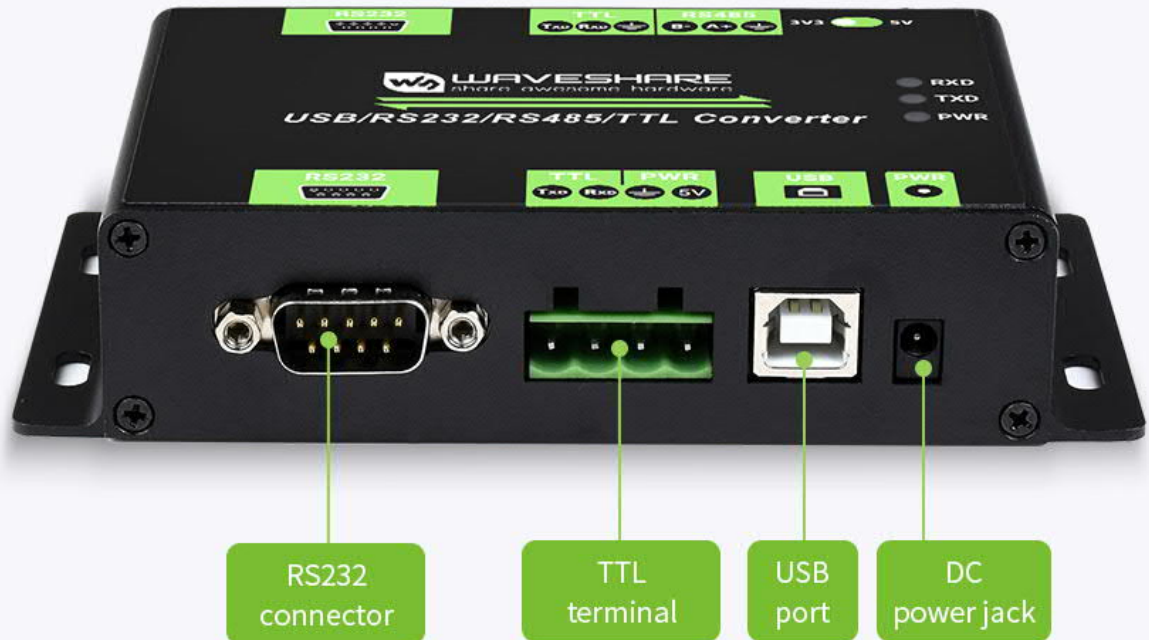
GROUP A	USB	Operating voltage	5V
		Connector	USB-B
		Protection	200mA resettable fuse, isolated output
	RS232	Connector	DB9 male
		Protection	TVS protection, surge-suppress, ESD protection
		Transmission mode	point-to-point
	TTL (UART)	Operating voltage	5V
		Connector	screw terminal
		Pinout	TXD, RXD, GND, 5V

		Protection	clamping protection diode, over-voltage protection, reverse-proof, shock-resistance, jamproof
		Connector	screw terminal
		Pinout	A+, B-, GND
		Direction control	hardware auto control
		Protection	lightningproof, surge-suppress, ESD protection
		Transmission mode	point-to- multipoints (up to 32 nodes, it is recommended to use repeaters for 16 nodes or more)
GROUP B	RS485		

	RS232	Connector	DB9 male
		Protection	TVS protection, surge-suppress, ESD protection
		Transmission mode	point-to-point
	TTL (UART)	Operating voltage	3.3/5V
		Connector	screw terminal
		Pinout	TXD, RXD, GND
		Protection	clamping protection diode, over-voltage protection, reverse-proof, shock-resistance, jamproof
	Temperature	-25°C ~ 85°C	

OPERATING ENVIRONMENT	Humidity	5%RH ~ 95%RH
OS SUPPORT	Windows 11 / 10 / 8.1 / 8 / 7 / XP	
NOTE	only one pair of devices will be matched for a complete communication between the Group A and Group B terminals at the same time	

Interface Introduction



Multi-Protocol Multi-Bus Conversion

Transmitting data from Group A terminals to Group B

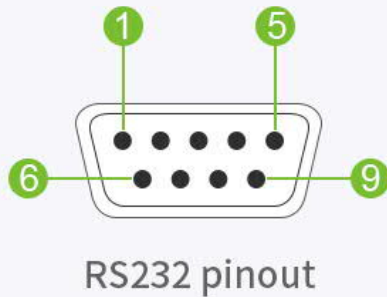


Transmitting data from Group B terminals to Group A



- Terminals in the same group cannot communicate with each other.
- Terminals in the same group cannot send data at the same time, while concurrently receiving is allowed.

Pinout Definition



RS232 pinout	
DB9 Male (PIN)	Description
2	Receiving data (RXD)
3	Sending data (TXD)
5	Ground GND
1, 4, 6, 7, 8, 9	N/C

Operating Status Indicators

3x LED Indicators For Easily Checking Power Connection And Signal TX/RX Statuses



1

PWR: light up red
power supply connected

2

TXD: blinking green
sending data

3

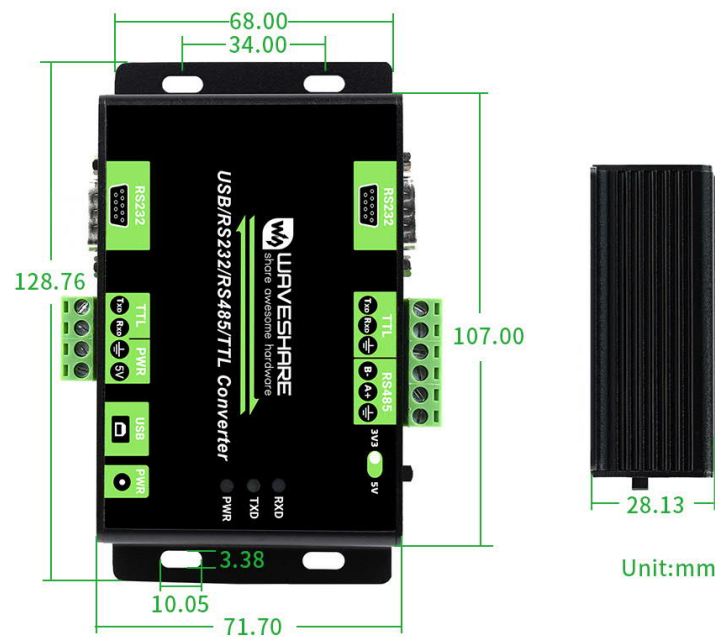
RXD: blinking blue
receiving data

Aluminium Alloy Enclosure

Aluminium Alloy Enclosure With Oxidation Dull-Polish Surface,
Solid And Durable, Nice Looking



Outline Dimensions



Resources & Services



WAVESHARE
ORIGINAL ✓



PROFESSIONAL
TECH SUPPORT



RICH RESOURCES
MANUAL & DEMO

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