

OIKWAN

Instruction manual

USB to RS485/422 Converter

Dongguan Aiqun Industrial Co.,Ltd

Parameter

- Input: USB 2.0-AM
- Output: DB9 male, using with terminals
- Compliant with USB 2.0 standard and backward compatible with USB 1.1
- Serial Port Standards: RS-422 and RS-485 standards
- USB Signal: VCC, DATA+, DATA-, GND
- RS-485 Signal: T/R+, T/R-, GND
- RS-422 Signal: TXD+, TXD-, RXD+, RXD-, GND
- Baud Rate: 300-921600bps
- Transmission Distance: 1200m(9600bps)
- Support: Windows 7/8/10/11 / Mac OS / Linux system

Packing List

Usb to RS485/422 Converter	1pcs
Terminal Block	1pcs
User Manual	1pcs
Certificate Of Qualification	1pcs

Product Details

USB A/Male DB9
Terminal Block

Driver Installation

The product is driver-free for Windows 7 and above. If the system can't install drivers correctly or we are now using other operating systems , we need to install drivers manually. Driver's download link from FTDI official website: <http://www.ftdichip.com/drivers/Vcp.htm>
Installation guidance: <http://www.ftdichip.com/Support/documents/Installguides.htm>

Step 1: Navigate to the Drivers-FTDI official website and select "VCP Drivers " in the navigation bar

Step 2: Select the driver according to your system, and then download it.

Currently Supported VCP Drivers:

Operating System	Release Date	X86 (32-BIT)	X64 (64-BIT)	PPC
Windows (Desktop)*	2021-07-15	2.12.36.4	2.12.36.4	-
Windows (Universal)**	2021-11-12	2.12.36.4U	2.12.36.4U	-
Linux	-	-	-	-
Mac OS X 10.3 to 10.8	2012-08-10	2.2.18	2.2.18	2.2.18

Step 3: Right click "computer", and then left click "Properties" and "Device Manager". Here you can see the faulty hardware with exclamation point.

Step 4: Right click "FT232R USB UART", and then left click "Upgrade driver software"

Step 5: Left click "Browse my computer for driver software".

Step 6: Left click "browse" and locate the driver folder. Then left click "OK" and "Next".

Step 7: After installation, you will see a successful message! Left click "Close".

Step 8: Refresh the device manager page, and you will see a new project "USB Serial Port" with exclamation point. Now you need to install a second driver from the same driver folder according to the 4-6 steps.

Step 9: After completing these steps, you will see another successful message! Left click "Close".

Step 10: Refresh the device manager page again to display the USB Serial Port (COMxx) where xx is a number. Congratulations, you have the right FTDI driver now and can start using your device.

RS-485/422 Pin Assignment for the Output Signal & Terminals Block

Terminals	Output Signal	RS-422 Full Duplex	RS-485 Half Duplex
1	T/R+	RS-422(A+)	RS-485(A+)
2	T/R-	RS-422(B-)	RS-485(B-)
3	RXD+	RS-422(A+)	-
4	RXD-	RS-422(B-)	-
5	GND	GND	GND

How It Works

USB to RS-422 Point-to-Point / 4-Line Full Duplex

USB to RS-422 Point-to-Multipoint / 4-Line Full Duplex

USB to RS-485 Point-to-Point / 2-Line Half Duplex

USB to RS-485 Point-to-Multipoint / 2-Line Half Duplex

Failure Elimination

- Data communication failure**
 - Check the USB port with correct connection;
 - Check the RS-485/422 output port with correct connection;
 - Check the terminal blocks with correct connection;
 - Check the power.
- Data loss or fault**
 - Check the data rate and format of the both ends of the data communication device are consistent.

Note
Using with terminal block.