

**OIKWAN**

# Instruction manual

## USB-C to RS485/422 Converter



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### Parameter

- Input: USB-C Male
- Output: DB9 male, using with terminals
- Serial Port Standards: RS-422 and RS-485 standards
- USB-C 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-C to RS485/422 Converter	1pcs
Terminal Block	1pcs
User Manual	1pcs
Certificate Of Qualification	1pcs

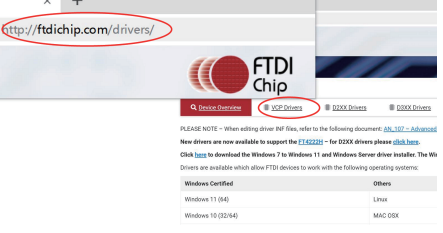
### Product Details



### 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

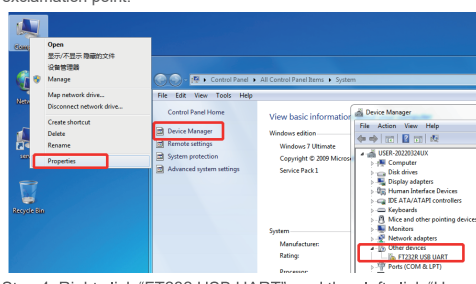


### Step 2: Select the driver according to your system, and then download it.

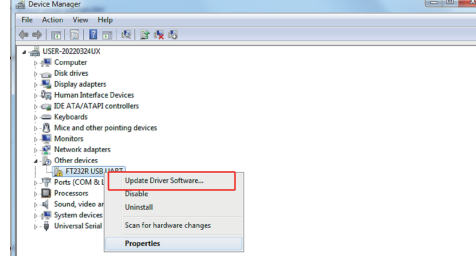
Currently Supported VCP Drivers:

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

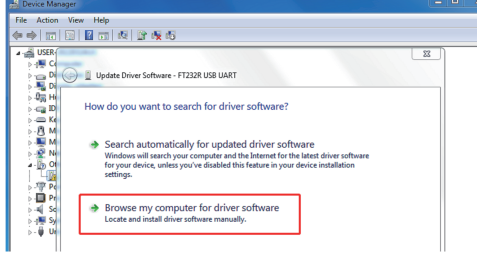
### Step 3: Right click "computer", and then left click "Properties" and "Device Manager". Here you can see the faulty hardware with exclamation point.



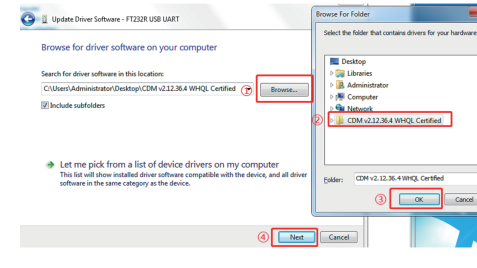
### Step 4: Right click "FT232R USB UART", and then left click "Upgrade driver software".



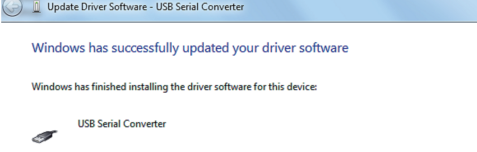
### Step 5: Left click "Browse my computer for driver software".



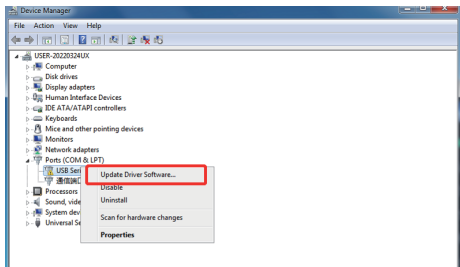
### Step 6: Left click "browse" and locate the driver folder. Then left click "OK" and "Next".



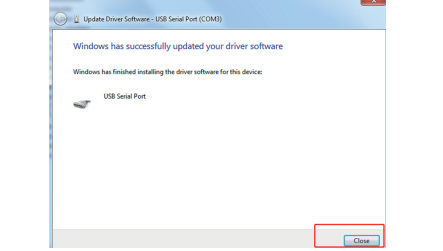
### Step 7: After installation, you will see a successful message! Left click "Close".



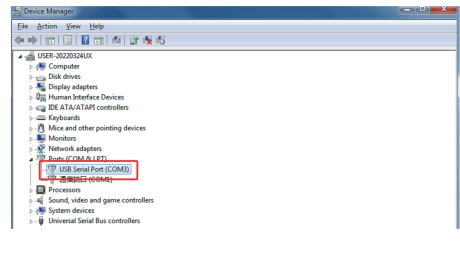
### Step 8: Refresh the device manager page, and you will see a new project "USB Serial Port" with exclamation point. Now you need to install a second driver from the same driver folder according to the 4-6 steps.



### 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.

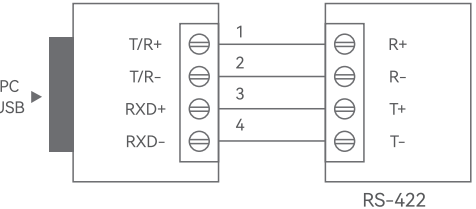


### RS-485/422 Pin Assignment for the Output Signal & Terminals Block

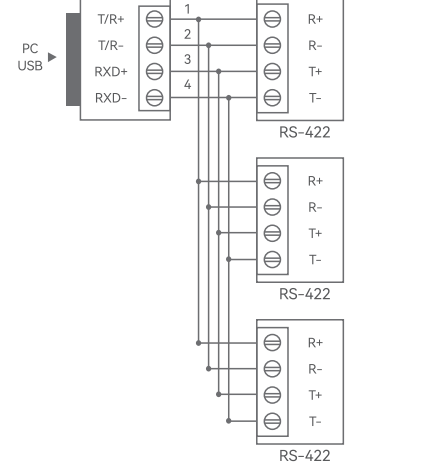
Terminals	Output Signal	RS-422 Full Duplex	RS-485 Half Duplex
1	T/R+	RS-422(A+)	RS-485(A+)
2	T/R-	RS-422(B-)	RS-485(B-)
3	RXD+	RS-422(A+)	-
4	RXD-	RS-422(B-)	-
5	GND	GND	GND

### How It Works

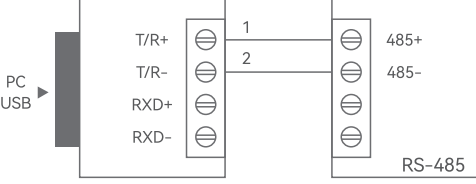
USB to RS-422 Point-to-Point / 4-Line Full Duplex



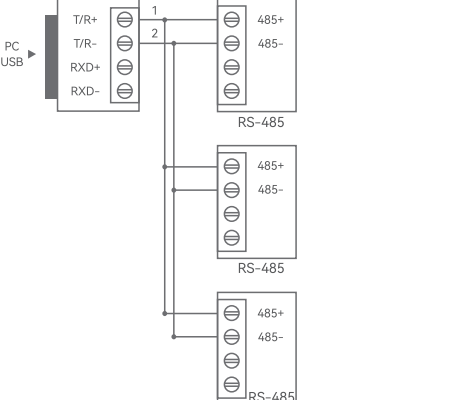
USB to RS-422 Point-to-Multipoint / 4-Line Full Duplex



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-C Male 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.