



USB4485
USB to 4 ports RS485/422 converter
User manual

3onedata

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1. Introduction

A quick and easy way to expand your PC's port count and to adapt serial devices to your USB PC. Edge port USB-to-Serial converters are intelligent expansion units that connect to a PC, thin client or server via a USB port. USB4485 provides four RS-485/422 serial ports, is compliant with USB 1.1 and 2.0 specifications, and meet the 480 Mbps high-speed requirement of Hi-Speed USB 2.0. Using your computer's USB ports to connect serial devices reduces the total cost of ownership, investment in hardware, and long term management and integration costs.

2. Packing List

USB4485 product is shipped with the following items:

- ◎ USB4485 × 1
- ◎ 5VDC power adapter × 1
- ◎ CD for software × 1
- ◎ User manual × 1

3. Features

- ◎ USB to 4-port RS-485/422 converters
- ◎ Single chip(ASIC) USB port to serial port communication
- ◎ Support Windows98/ME and Windows2000/XP, Windows Server 2003/2008, Windows 7/Vista
- ◎ Support Linux, Mac
- ◎ Support powered from USB or 5VDC external power input
- ◎ No IRQ, I/O Address
- ◎ Support USB2.0, baud rate can reach up to 12Mbps
- ◎ 15KV ESD protection

4. Specifications

USB

Compliance: USB1.1/2.0 compliant

USB signal: VCC, DATA+, DATA-, GND, FG

Speed: 480Mbps (high-speed), 12Mbps (full-speed)

Connector for External Antenna: USB type B female

RS-485/422

Standards: RS-485, RS-422

Number of Ports: 4

Connectors: DB9 male

RS-422 signal: TX+(A), TX-(B), RX+(A), RX-(B), GND

RS-485 signal: D+(A), D-(B), GND

Working mode: Asynchronous, point to point, 2 wires half duplex, 4 wires full duplex

Transmission: 1200m

Interface protection: 1500W surge protection,15KV ESD protection

Baud rate: 300bps to 230400bps

Parity: None, Even, Odd, Space, Mark

Data bits: 7, 8

Stop bits: 1, 2

Flow Control: RTS/CTS, XON/XOFF

FIFO: 128bytes

Driver Support

Operating System: Support Windows98/ME and Windows2000/XP,Windows Server 2003/2008, Windows 7/Vista

Power

Power input: 5VDC power input

Consumption: 300mA

Environment

Operating temperature: -10°C to 60°C

Storage temperature: -40°C to 85°C

Humidity: 5% to 95%(no condensation)

Appearance

Dimensions: 160.0mm×94.0mm×28.0mm

Material: Iron(shell)

Color: White

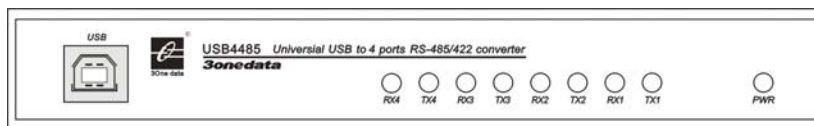
Weight: 500g

Warranty: 5 years

Approvals: FCC, CE, RoHS approvals

5. Panel Layout

5.1 Front Panel

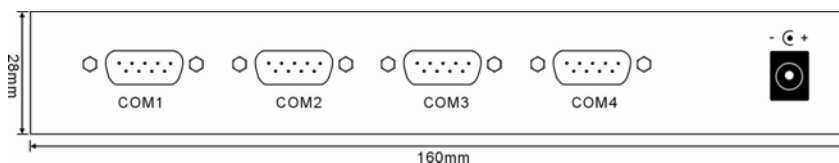


USB: USB connector

RX1, TX1, RX2, TX2, RX3, TX3, RX4, TX4: COM1~4 port receive and send indicator

PWR: power indicator

5.2 Front Panel

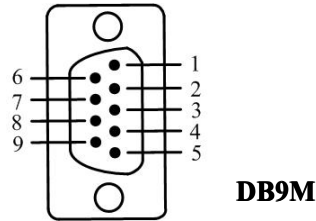


COM1~4: RS-485/422port

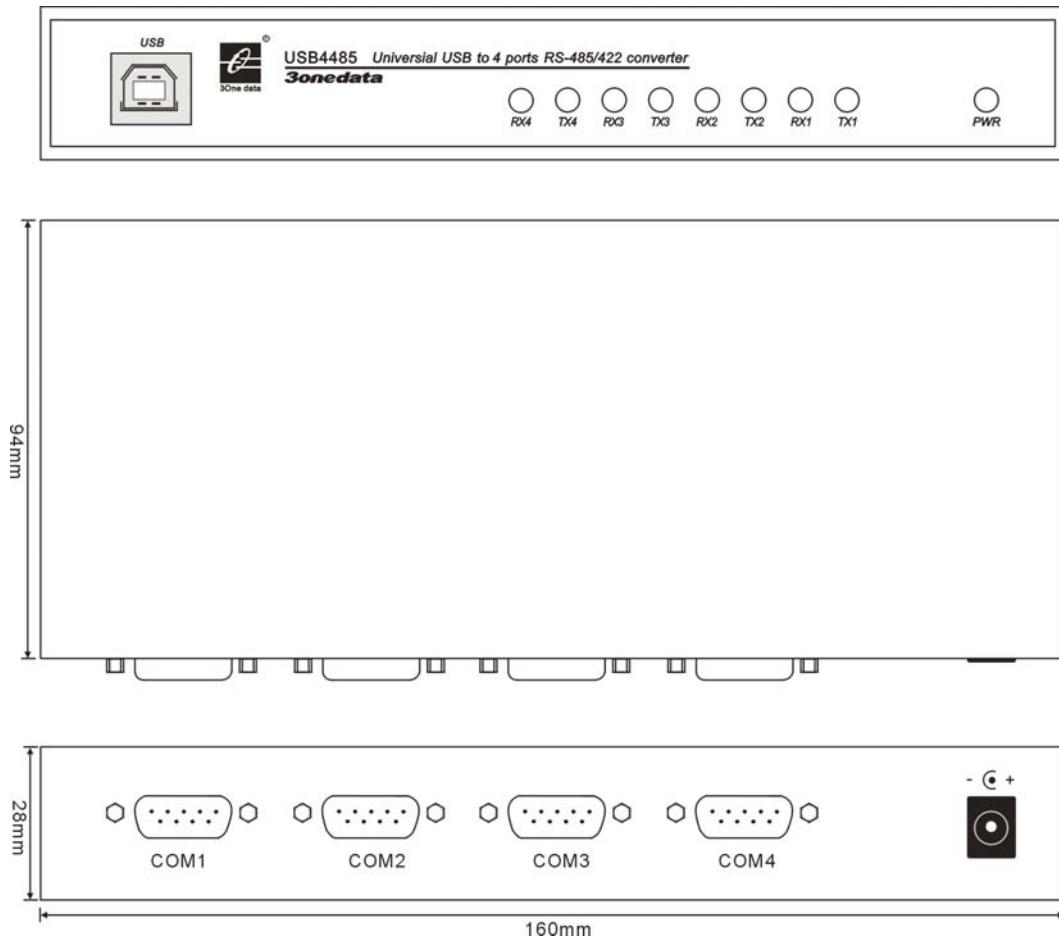
Power input jack: 5VDC power supply

5.3 RS-485/422 Pinout

RS-485: 1 D-(B) 2 D+(A)
RS-422: 1 TX-(B) 2 TX+(A)
 3 RX+(A) 4 RX-(B)



6. Dimension



7. Driver Installation

7.1 Installing the Driver for the Converter(first time use the USB4232)

The operating system will automatically detect the USB232. when you plug it into one of your computer's USB ports. If you have installed the latest USB4232 driver, the USB4232's serial port will be installed automatically. If the USB4232 and the serial ports are not installed automatically, follow the instructions below.

I. After connecting the USB cable from the USB4232 to the host PC, Windows XP will automatically detect the new USB4232, and the Found New Hardware balloon will open in the bottom right corner of the Windows desktop.

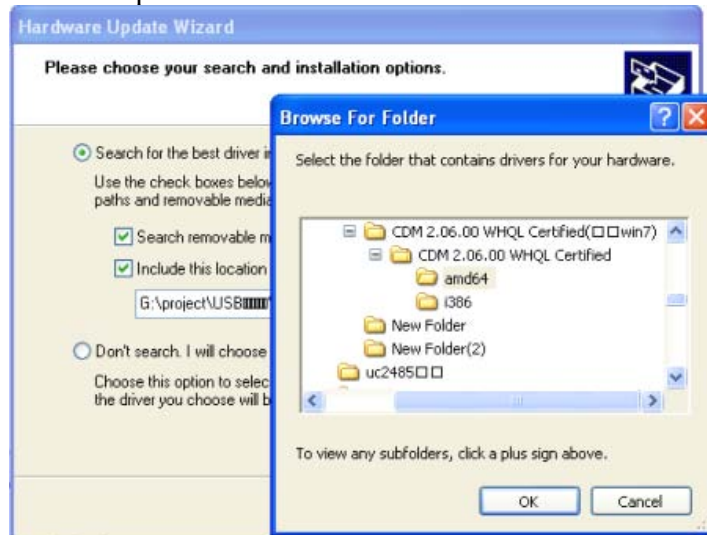
Product information prompting: USB to RS485/422



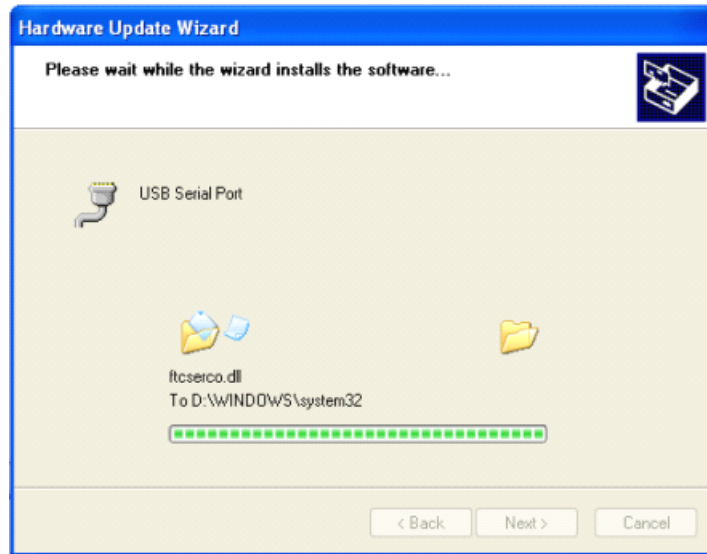
II. Driver installation guide. Select Yes, this time only. Click Next to start the installation.



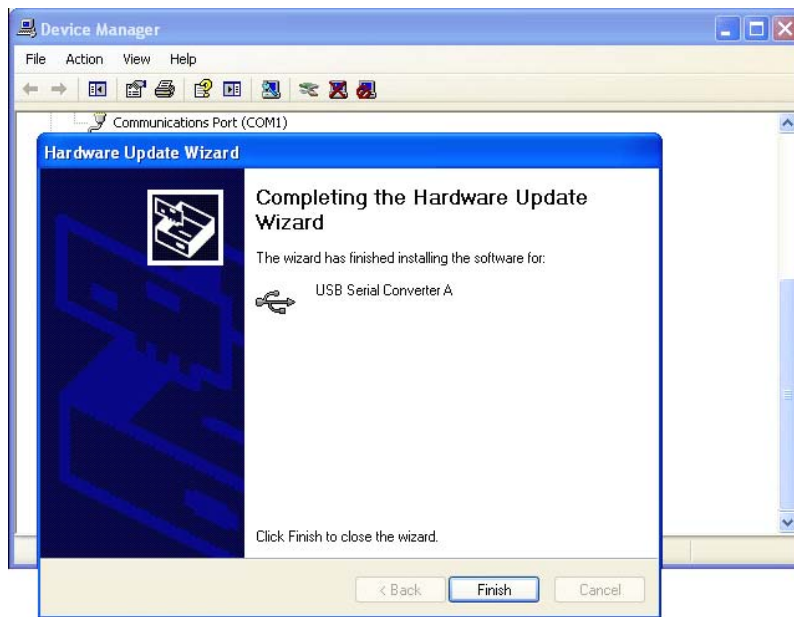
III. Select the installation path.



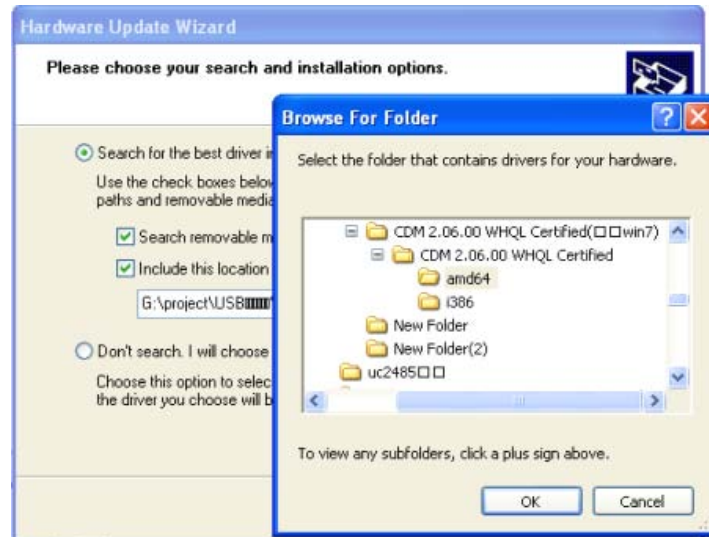
IV. Program loading.



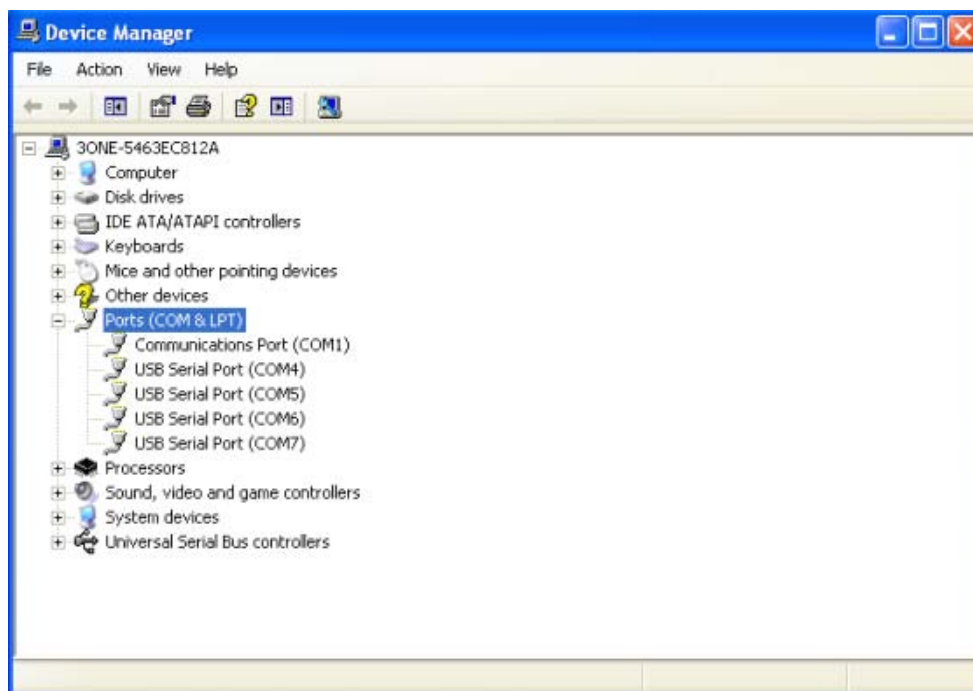
V. Loader success, indicates that Windows has completed the driver installation. Click Finish to proceed with the rest of the installation procedure.



VI. Found virtual port, select the installation path again.



VII. Repeat 3 times install the driver for the port, It created 4 virtual serial port in the PC. The **Found New Hardware** balloon will reappear to inform you that the hardware was installed successfully. You can see them in Device Manager as follows(COM4~COM7):

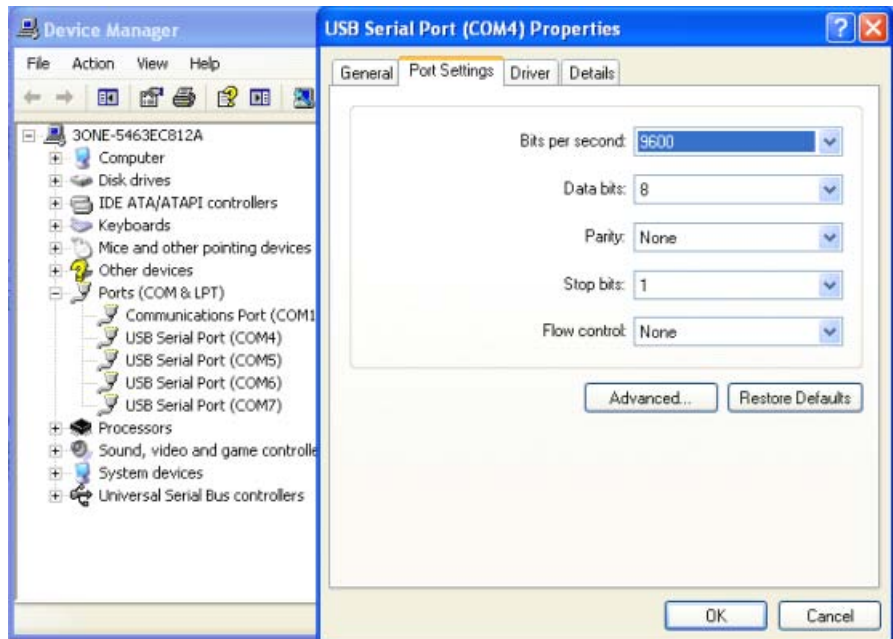


7.2 Configuring serial port properties

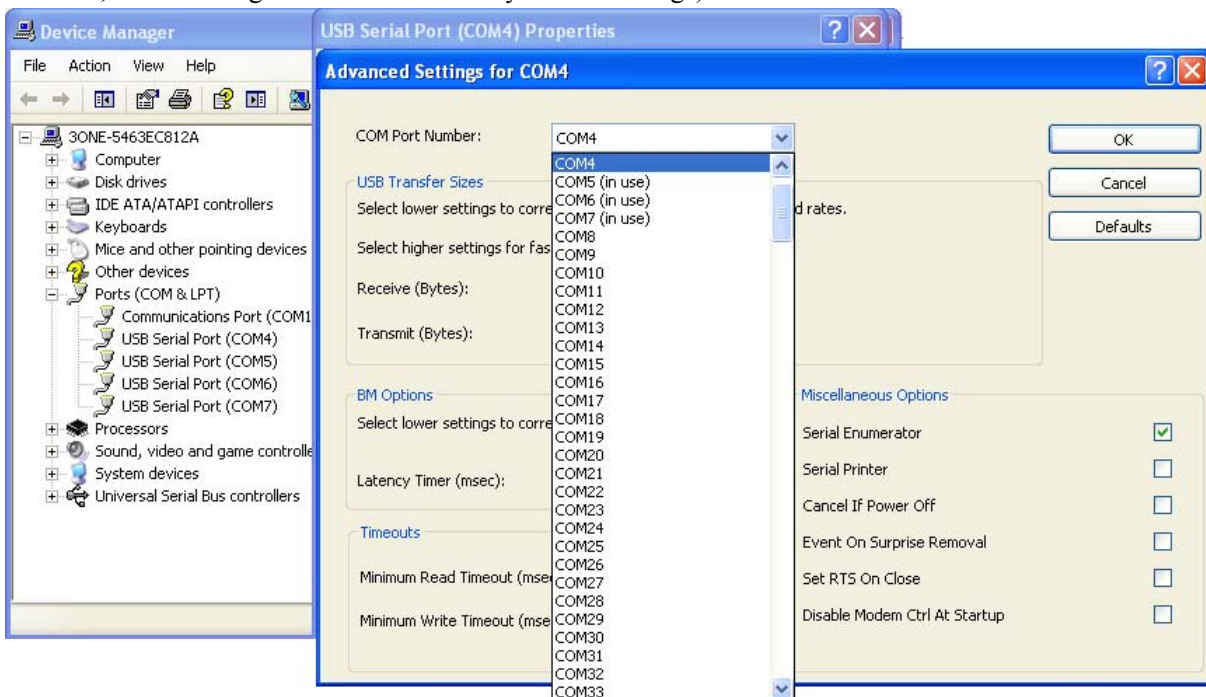
After the driver has been installed, use Windows' **Device Manager** to configure the USB4485 serial ports. (click **Start** → **Settings** → **Control Panel** → **System**, select the

Hardware tab, and then click **Device Manager**.)

Right click the serial port, select properties, you can see the information of serial port properties in General, Port Setting, Driver, Details (generally, configuring is not necessarily, cause USB4485 can automatically detect data).



Select Advanced settings for COM, you can redistribute the port.(If you click the Restore Defaults, all the settings will return to Factory default settings)



NOTE:

In use: the port is used.

After change serial port properties, must select scan the hardware again or reinsert USB cable, otherwise, the port is not displayed.