



USB to RS-422/485 Serial Adapter UTS series

Quick Installation Guide

Ver.1

Please visit <https://www.sunix.com> for the latest manual & driver update

Introduction

SUNIX ComHub UTS series transform your Universal Serial Bus (USB) port into asynchronous RS-422/485 serial ports for communication with serial devices. The UTS adapter is compatible with both USB 2.0 and 1.1 specifications and provides serial port with transfer speed up to 921.6Kbps. It provides a quick, simple and cost-effective way to bring the advantages of data accessibility and mobile solution for kinds of commercial and industrial automation applications.

Features

- Expands 1 or 4 independent RS-422/485 serial ports through USB interface.
- Supports Universal Serial Bus Plug-n-Play and Hot-Swapping feature.
- No IRQ, DMA, I/O address resource required.
- Supports USB2.0 and USB1.1 compatible.
- Serial port provides transmission rate up to 921.6Kbps.
- Built-in ± 15KV ESD protection for all serial signals.
- Compact Size and low power consumption.
- Supports USB bus power without additional external power.
- Certified by CE, FCC, RoHS, and Microsoft WHQL approval.
- Support Microsoft Windows and Linux.

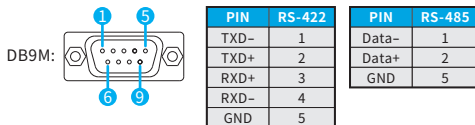
Package Checklist

Please check if the following items are present and in good condition upon opening package. Contact your vendor if any item is damaged or missing.

- USB to RS-422/485 Adapter, Cable 120cm or 150 cm (Product Dependent)
- DB9 Female to 5-pin Terminal Block Adapter
- Quick Installation Guide

Pin Assignment

COM port pin assignments for USB to Serial Adapter



Specification

USB Communication

Interface	Universal Serial Bus (USB)
Controller	Prolific PL2303GC
Performance	USB 1.1 full speed 12Mbps USB 2.0/3.0/3.1 compatible.
Receptacle	USB Type-A with cable

Serial Communication

Interface	RS-422/485
No. of Port	1 or 4-port (Product Dependent)
FIFO	1024-byte bi-directional data FIFO buffers Receive 768 byte Buffer Hardware Transmit 256 byte Buffer Hardware
Signal	RS-422: TxD+, TXD-, RxD+, RxD-, GND RS-485: Data+, Data-, GND
Baud rate	50 ~ 921.6Kbps
Stop bit	1, 1.5, 2
Parity	even, odd, none, mark, space
Flow Control	XON/XOFF
Protection	±15KV ESD protection for each signal Human Body Model ±15KV IEC61000-4-2 Air Gap Discharge ±8KV IEC61000-4-2 Contact Discharge
Receptacle	DB9 Male with Screw nuts

Driver Communication

Windows Client	7 / 8.x / 10 (X86/X64) / 11
Windows Server	Server 2008 / 2008R2 / 2012 / 2012R2 / 2016 / 2019 (X64)
Linux	Linux 2.6.x or later
Mac	OS 10.9-11

Power

Source	USB Bus-power +5VDC(±5%)
External Power	DC-Jack for 5VDC Power Adapter(Optional)

Operating Environment

Temperature	0 to 60 °C (32 to 140 °F)
Humidity	5% to 95% RH

Storage Environment

Temperature	-20 to 85 °C (-4 to 185 °F)
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Regulatory Approvals

EMC	EUR: CE, US: FCC, Japan: VCCI, TAIWAN: BSMI
Green	RoHS, WEEE, REACH

Driver Installation/Verify

Microsoft Windows

In order to ensure proper operation of your USB to serial adapter, please follow the instructions below:

- Please go to SUNIX website for latest driver download.
- Click the Setup.exe from your driver.
- Follow the onscreen installation step.
- After finishing installation, please connect the USB Serial Adapter to your PC.
- Please check to see if each is installed properly in Device Manager.



Setup.exe

Start > Controller Panel > System > Device Manager



Apple macOS

Please download the driver for macOS, which includes driver and installation guide.

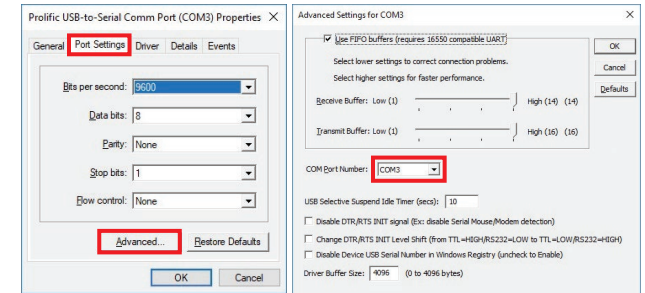
Linux

- Please go to SUNIX website for latest driver download.
- Please find the nearest Linux kernel version first.
- make all // make a new driver.
- sudo rmmod pl2303.ko // remove driver
- sudo insmod pl2303.ko // add_1 a new driver
- sudo cp pl2303.ko //lib/modules/\$(uname r)/kernel/drivers/usb/serial // add_2 a new driver

Port Setting

After installing USB to Serial Adapter successfully, you can modify the setting for each port in Device Manager.

- Right click your mouse on the COM port, and select "Properties".
- Select "Port Setting" page to modify COM port setting.
- Select "Advanced" icon, you can modify COM port number and FIFO.

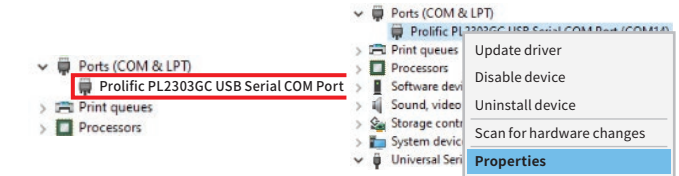


- When serial device requires setting to a specific COM number, confirm the port number match the settings required for your serial device.

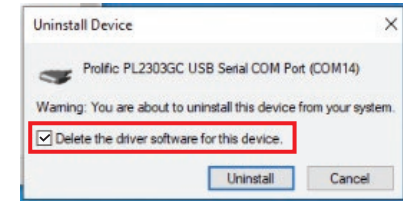
Uninstalling Driver

After installing USB to Serial Adapter successfully, you can modify the setting for each port in Device Manager.

- You can go to the Device Manager and right click your mouse on the COM port, and select "Properties".



- Please select "Driver".
- Please select "Uninstall" in the Driver setting.
- Select "Delete the driver software for this device" to finish the uninstallation.



Troubleshooting

After installing USB to Serial Adapter successfully, you can modify the setting for each port in Device Manager.

- Q 1. The USB to Serial Adapter will NOT communicate with my serial device.
Ans: It may cause by following issue:
- Please verify that the USB to Serial Adapter is installed correctly.
 - Confirm that the port settings match the settings required for your serial device.
 - If the serial device requires software, make sure it's installed properly.
 - Make sure the number of ports is matching the number of USB to Serial Adapter COM port.
 - USB to Serial Adapter does NOT support serial mouse.
 - Please download the latest driver to support your new serial product.

- Q 2. Why the COM port number will be different?
Ans: The COM port number is assigned by which USB slot is used to connect to the computer.
If changing USB slot, the port number will change. Please keep installing USB adapter in the same USB slot.

