Type-C+USB2.0 to RS232/ RS485/RS422 Serial Cable

User manual

Browser scan code to
download the product driver file.

I. Product Introduction

As the continuous development of the PC industry, various larger peripheral interfaces of old PCs (such as DB9 serial interface) are gradually being can celled. However, many important devices in the industrial environment need to use RS485 interfaces to realize data communication, so many users want use Type-C to RS232/485/422 converter to realize the data transmission between PC and RS232/485/422 equipment.

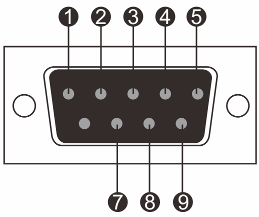
This universal Type-C to RS232/485/422 converter requires no external power supply and is compatible with Type-C and RS232/485/422 standards. It can convert single-ended Type-C signals to RS232/485/422 signals, providing 600W surge protection power per line, and the surge voltage generated on the line for various reasons and the extremely small inter-electrode capacitance ensure the high-speed transmission of the RS232/485/422 interface. The RS232/485/422 end is connected through the DB9 male connector . The converter is equipped with zero-delay automatic transmission and reception conversion, and the unique I/0 circuit automatically controls the direction of data flow.

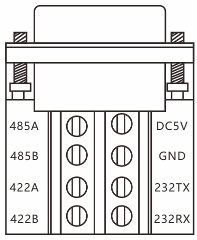
The Type-C to RS232/485/422 converter can provide reliable connection for point-to-point and point-to-multipoint communication. Each RS485 point-to-multipoint converter can connect up to 256 RS485 devices, and the RS485/422 communication rate is 300bps up to 3Mbps, RS232 communication rate is 300bps to 115200bps. Products are widely used in industrial automation control systems, access control systems, attendance systems, credit card systems, building automation systems, power systems, and data acquisition systems.

II . Product Parameters

1. RS485/422 communication rate: 300bps to 3Mbps.
2. RS232 communication rate from 300bps to 115200bps.
3. RS485 can connect up to 256 RS485 devices.
4. Data bits: 5,6,7,8.
5. Check digit: Even, Odd, None, Mark, Space.
6. Stop bit: 1, 1.5,2.
7. Transceiving buffer: receiving 512 bytes, sending 512 bytes.
8. ±8KV, IEC61000-4-2 contact discharge
   ±15KV, IEC61000-4-2 air gap discharge
   ±15KV, EIA/JEDEC human body model discharge.
9. Support DC 5V power output (the output current is determined by the computer USB output).
10. Standard: Comply with USB2.0 standard, RS232/485/422 standard.
11. Support: Windows, Mac, Linux (no driver for Linux kernel 4.0 or higher).
12. Use environment: -20°C to 80°C, relative humidity is 5% to 95%.

III. Installation Details



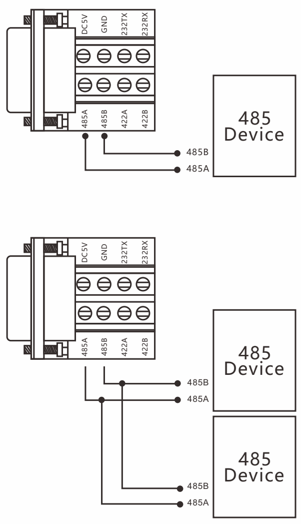

485A
485B
422A
422B
DC5V
GND
232TX
232RX

DB9 Male Pin definition			
PIN	Definition	PIN	Definition
❶	RS485A	❺	GND
❷	RS485B	❼	RS232-RXD
❸	RS422A	❽	RS232-TXD
❹	RS422B	❾	DC 5V

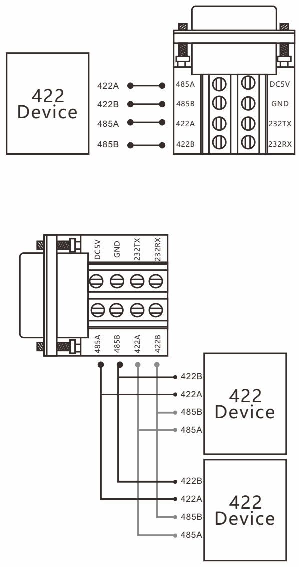
Terminal pin definition			
Position	Definition	Position	Definition
RS485A	RS485A Communication Interface	DC 5V	Power output
RS485B	RS485B Communication Interface	GND	Grounded
RS422A	RS422A Communication Interface	RS232 TX	RS232 sender
RS422B	RS422B Communication Interface	RS232 RX	RS232 receiver

IV. Installation Matters

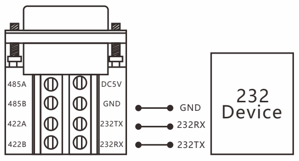
RS485 Connection diagram


DC5V
GND
232TX
232RX
485A
485B
422A
422B
485B
485A
485
Device
485B
485A
485
Device
485B
485A
485
Device

RS422 Connection diagram


422
Device
422A
422B
485A
485B
485A
485B
422A
422B
DC5V
GND
232TX
232RX
422B
422A
485B
485A
422
Device
422B
422A
485B
485A
422
Device

RS232 Connection diagram


485A
485B
422A
422B
DC5V
GND
232TX
232RX
GND
232RX
232TX
232
Device

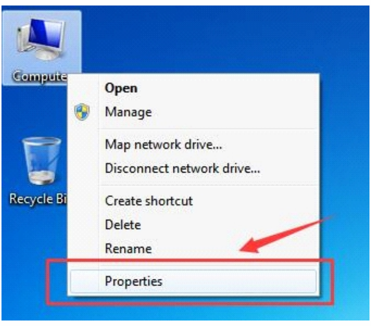
V. Packaging And Accessories

1. Product *1
2. Terminal block*1

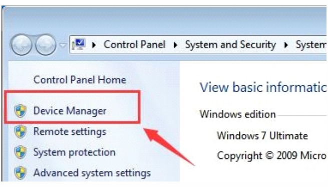
Type-C+USB2.0 to RS232/ RS485/RS422 Serial Cable

Manual

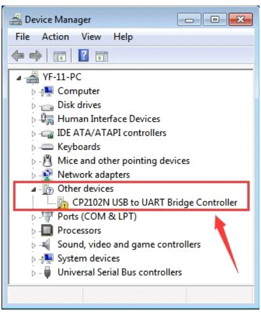
Step 1: Put the mouse on the "Computer" icon, click the "right mouse button", and then click "Properties"


Compute
Recycle Bi
Open
Manage
Map network drive...
Disconnect network drive...
Create shortcut
Delete
Rename
Properties

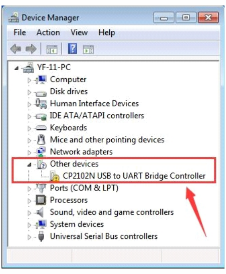
Step 2: Click the "Device Manager"


Control Panel ▸ System and Security ▸ System
Control Panel Home
Device Manager
Remote settings
System protection
Advanced system settings
View basic informatic
Windows edition
Windows 7 Ultimate
Copyright © 2009 Micro

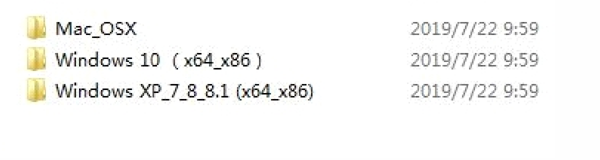
Step 3: When the driver is not installed, you can see the following information on the device manager


Device Manager
File Action View Help
YF-11-PC
Computer
Disk drives
Human Interface Devices
IDE ATA/ATAPI controllers
Keyboards
Mice and other pointing devices
Network adapters
Other devices
CP2102N USB to UART Bridge Controller
Ports (COM & LPT)
Processors
Sound, video and game controllers
System devices
Universal Serial Bus controllers

Step 4: Before installing the driver, check the computer system


Device Manager
File Action View Help
YF-11-PC
Computer
Disk drives
Human Interface Devices
IDE ATA/ATAPI controllers
Keyboards
Mice and other pointing devices
Network adapters
Other devices
CP2102N USB to UART Bridge Controller
Ports (COM & LPT)
Processors
Sound, video and game controllers
System devices
Universal Serial Bus controllers

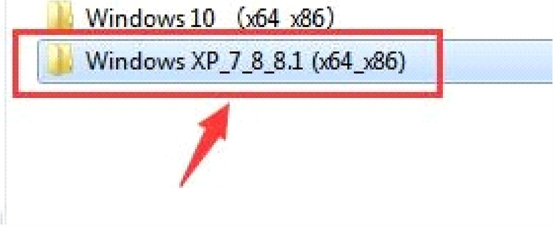
Step 5: After confirming the system, open the "Drive CD" that comes with this product, the content of the CD is shown



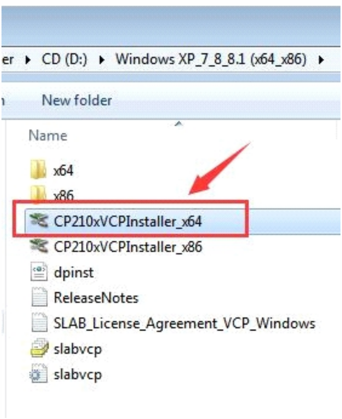
Mac_OSX 2019/7/22 9:59
Windows 10 (x64_x86) 2019/7/22 9:59
Windows XP_7_8_8.1 (x64_x86) 2019/7/22 9:59

Step 6: Select the corresponding system file to install (take windows 7_64 bit system as an example)

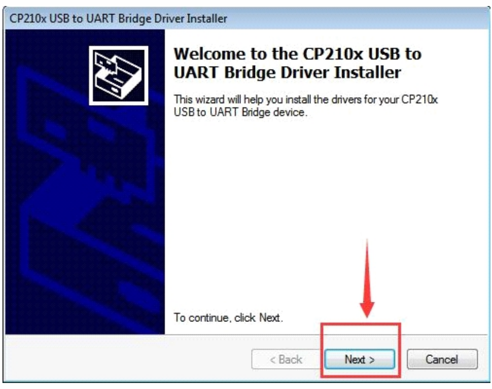
Mac_OSX


Windows 10 (x64 x86)
Windows XP_7_8_8.1 (x64_x86)

Step 7: Enter the folder and double-click the "CP210xVCPInstaller_x64" file


CD (D:) ▸ Windows XP_7_8_8.1 (x64_x86) ▸
New folder
Name
x64
x86
CP210xVCPInstaller_x64
CP210xVCPInstaller_x86
dpinst
ReleaseNotes
SLAB_License_Agreement_VCP_Windows
slabvcp
slabvcp

Step 8: Please click'Next'


CP210x USB to UART Bridge Driver Installer

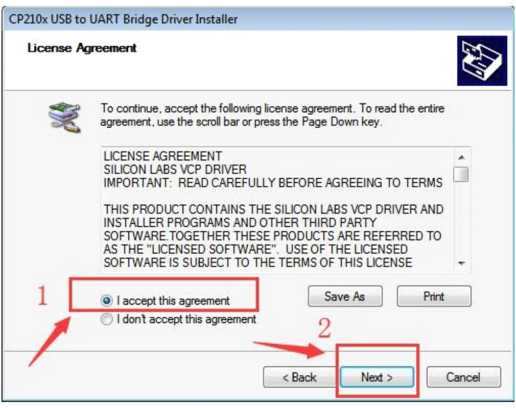
Welcome to the CP210x USB to UART Bridge Driver Installer

This wizard will help you install the drivers for your CP210x USB to UART Bridge device.

To continue, click Next.

< Back
Next >
Cancel

Step 9: please click "I accept this agreement", and then click "Next"


CP210x USB to UART Bridge Driver Installer

License Agreement

To continue, accept the following license agreement. To read the entire agreement, use the scroll bar or press the Page Down key.

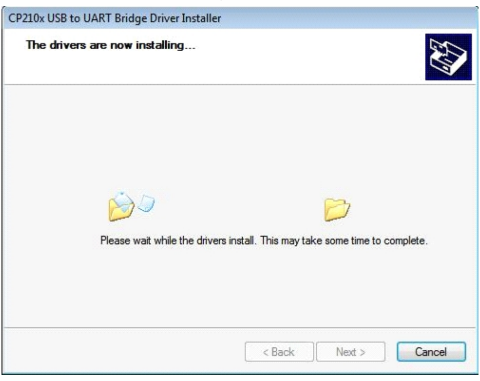
LICENSE AGREEMENT
SILICON LABS VCP DRIVER
IMPORTANT: READ CAREFULLY BEFORE AGREEING TO TERMS

THIS PRODUCT CONTAINS THE SILICON LABS VCP DRIVER AND INSTALLER PROGRAMS AND OTHER THIRD PARTY SOFTWARE.TOGETHER THESE PRODUCTS ARE REFERRED TO AS THE "LICENSED SOFTWARE". USE OF THE LICENSED SOFTWARE IS SUBJECT TO THE TERMS OF THIS LICENSE

● I accept this agreement
○ I don't accept this agreement

1
2
Save As
Print
< Back
Next >
Cancel

Step 10: The driver is being installed, please wait

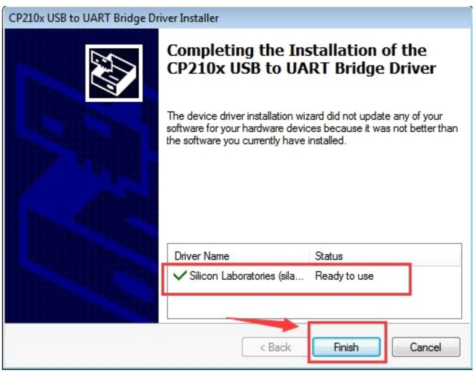

CP210x USB to UART Bridge Driver Installer

The drivers are now installing...

Please wait while the drivers install. This may take some time to complete.

< Back
Next >
Cancel

Step 11: The driver installation has been completed, please click "Finish"


CP210x USB to UART Bridge Driver Installer

Completing the Installation of the CP210x USB to UART Bridge Driver

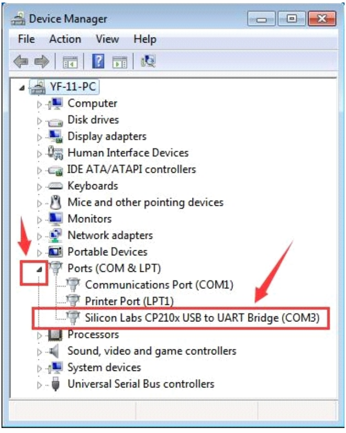
The device driver installation wizard did not update any of your software for your hardware devices because it was not better than the software you currently have installed.

Driver Name	Status
✓ Silicon Laboratories (sila...	Ready to use

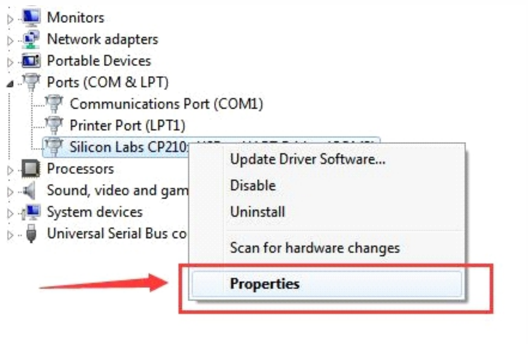
< Back
Finish
Cancel

If you need to change the port number, please do as follows

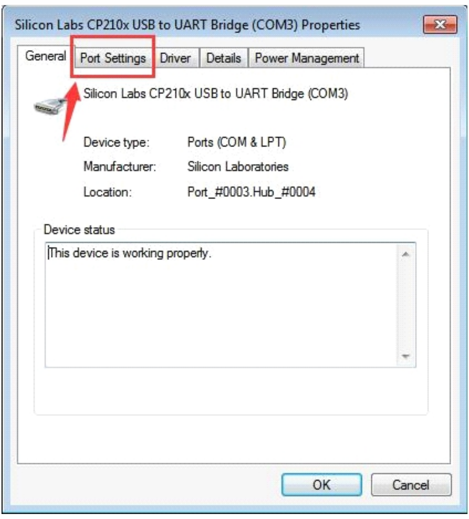
Step 1: Open the device manager, you can see the current device port number is "COM3", select "Silicon Labs CP210xUSB to UART Bridge (COM3)", click the right mouse button


Device Manager
File Action View Help
YF-11-PC
Computer
Disk drives
Display adapters
Human Interface Devices
IDE ATA/ATAPI controllers
Keyboards
Mice and other pointing devices
Monitors
Network adapters
Portable Devices
Ports (COM & LPT)
Communications Port (COM1)
Printer Port (LPT1)
Silicon Labs CP210x USB to UART Bridge (COM3)
Processors
Sound, video and game controllers
System devices
Universal Serial Bus controllers

Step 2: click"properties"


Monitors
Network adapters
Portable Devices
Ports (COM & LPT)
Communications Port (COM1)
Printer Port (LPT1)
Silicon Labs CP210x
Processors
Sound, video and gam
System devices
Universal Serial Bus co
Update Driver Software...
Disable
Uninstall
Scan for hardware changes
Properties

Step 3: click "port settings"


Silicon Labs CP210x USB to UART Bridge (COM3) Properties
General
Port Settings
Driver
Details
Power Management
OK
Cancel

Silicon Labs CP210x USB to UART Bridge (COM3)

Device type: Ports (COM & LPT)

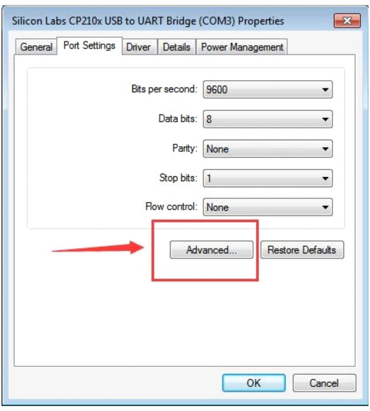
Manufacturer: Silicon Laboratories

Location: Port_#0003.Hub_#0004

Device status

This device is working properly.

Step 4: click "Advanced"


Silicon Labs CP210x USB to UART Bridge (COM3) Properties
General
Port Settings
Driver
Details
Power Management
Advanced...
Restore Defaults
OK
Cancel

Bits per second: 9600

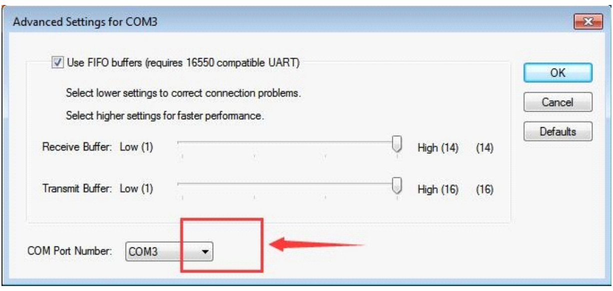
Data bits: 8

Parity: None

Stop bits: 1

Flow control: None

Step 5: click "COM Port Number"


Advanced Settings for COM3
OK
Cancel
Defaults

☑ Use FIFO buffers (requires 16550 compatible UART)

Select lower settings to correct connection problems.

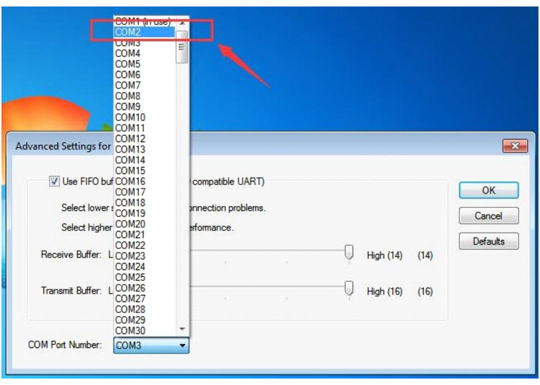
Select higher settings for faster performance.

Receive Buffer: Low (1) High (14) (14)

Transmit Buffer: Low (1) High (16) (16)

COM Port Number: COM3

Step 6: Select the port number you want to modify (take port COM2 as an example)


Advanced Settings for COM3

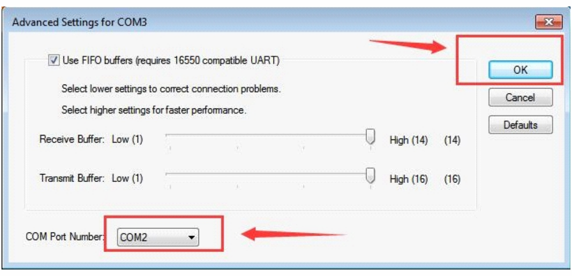
☑ Use FIFO buffers (requires 16550 compatible UART)

Receive Buffer: High (14) (14)

Transmit Buffer: High (16) (16)

COM Port Number: COM3
COM1 (in use)
COM2
COM3
COM4
COM5
COM6
COM7
COM8
COM9
COM10
COM11
COM12
COM13
COM14
COM15
COM16
COM17
COM18
COM19
COM20
COM21
COM22
COM23
COM24
COM25
COM26
COM27
COM28
COM29
COM30
OK
Cancel
Defaults

Step 7: After selecting the port "COM2", click "OK"


Advanced Settings for COM3

☑ Use FIFO buffers (requires 16550 compatible UART)

Select lower settings to correct connection problems.

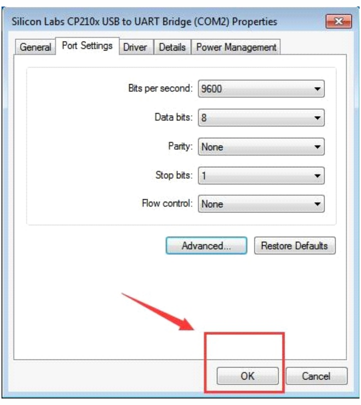
Select higher settings for faster performance.

Receive Buffer: Low (1) High (14) (14)

Transmit Buffer: Low (1) High (16) (16)

COM Port Number: COM2
OK
Cancel
Defaults

Step 8: Click "Ok"


Silicon Labs CP210x USB to UART Bridge (COM2) Properties

Bits per second: 9600

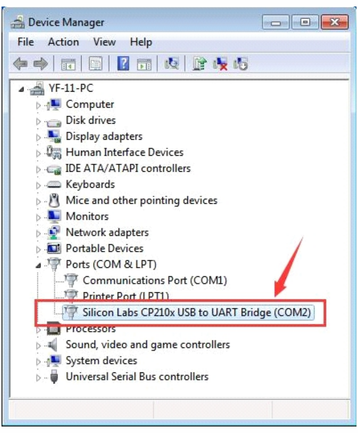
Data bits: 8

Parity: None

Stop bits: 1

Flow control: None
General
Port Settings
Driver
Details
Power Management
Advanced...
Restore Defaults
OK
Cancel

Step 9: In the device manager, you can see that the port has been modified to port "Silicon Labs CP210xUSB to UART


Device Manager

Ports (COM & LPT)

Silicon Labs CP210x USB to UART Bridge (COM2)
File
Action
View
Help
YF-11-PC
Computer
Disk drives
Display adapters
Human Interface Devices
IDE ATA/ATAPI controllers
Keyboards
Mice and other pointing devices
Monitors
Network adapters
Portable Devices
Communications Port (COM1)
Printer Port (LPT1)
Processors
Sound, video and game controllers
System devices
Universal Serial Bus controllers

Product Warranty Card

Customer Information

Model：	
Date of purchasel：	
User telephone：	
User address：	
Distributor：	
Agency address：	
User telephone：	Dealer stamp valid

Intenance Records

Repair times	Date	Fault	Treatment measures	Repair work NO.

Electronic products are guaranteed for one year, and other products are guaranteed for two years. Damage caused by human factors or product burnout caused by improper operation is not included in the scope of warranty.