

# **EVC8024 USB To Serial Converter**



Date	Description	Revision
2023-5-5	First Released	V1



## **1 Product Description**

- EVC8024 is a True High-speed 2.0 Max rate Up to 8M (USB To TTL/RS-232/RS-485/422) Isolated Interface Converter (hereinafter referred to as converter).
- The converter is using Full Galvanic Isolated scheme and proprietary technology to achieve two-way independent data exchange between high-speed USB and TTL \ RS-232 \ RS-485/422.
- The converter is powered by USB, built-in 3000V dual isolation power module, which
  makes the power supply input and communication interface completely electrically
  isolated, and provides hardware guarantee for safe transmission and interface
  performance.

#### 2 Driver Download

Windows 7/8/10system: http://www.ftdichip.com/Drivers/CDM/CDM21228\_Setup.zip MacOSX10.3~10.8:

http://www.ftdichip.com/drivers/VCP/MacOSX/FTDIUSBSerialDriver\_v2\_2\_18.dmg MacOSX10.9 and later support:

http://www.ftdichip.com/Drivers/VCP/MacOSX/FTDIUSBSerialDriver\_v2\_4\_2.dmg

Windows CE system: http://www.ftdichip.com/Drivers/VCP.htm

Android system: [4.0 and later support]

Linux system: [3.0 and later kernel directly support]

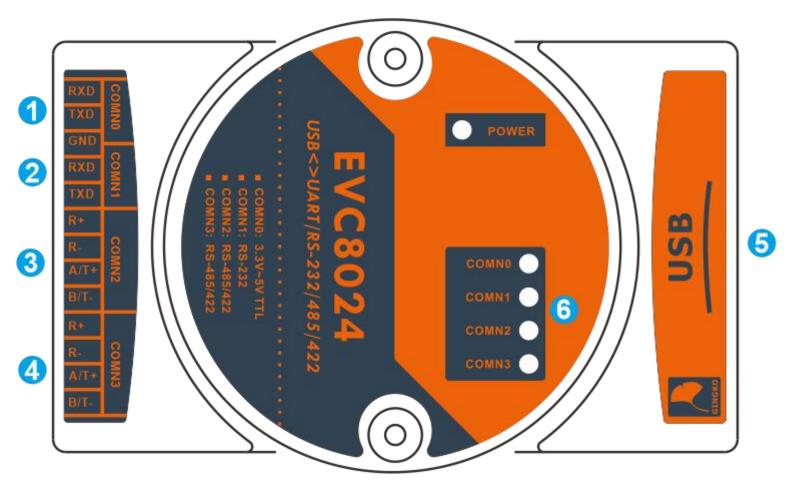


## 3 Technical index

Item	Property
Baud rate:	TTL(110~5Mbps),RS-232(110~1Mbps),RS-485/422(300~8Mbps)
Isolation scheme:	Using ADI high performance magnetic decoupling isolation program
Output interface:	Standard TTL,RS-232(Full-duplex),RS-485(Half-duplex),RS-422(Full-duplex)
Isolation voltage:	2500Vrms(using brand voltage module with 3000V isolation voltage)
Interface scheme:	Hyperstability FT4232 chip
Load performance:	RS-485 can attach 256 nodes (if load capacity support)
Output protection:	Lightning protection+TVS protection+Filter network
Power supply scope:	4.75~5.25V
Work instructions:	Power supply instructions, sending instructions, receiving instrutions
Operation system:	Support Windows,Linux,MAC,Android,Windows CE
Operating temperature:	-40°C ~ 85°C industrial grade
Warranty policy:	One year warranty, lifetime cost maintenance
Mechanical dimensions:	112*70*26(mm)(Length X Width X height)



### **4 Functions**



#### 1 COMNO<>TTL interface:

The connection mode of this interface is cross-connect, when connecting, the connection mode is:

RXD:UART port receiver connect to external UART sender (TXD)

TXD:UART port sender connect to external UART receiver (RXD)

GND:GND connect to GND,COMN0 and COMN1 shares GND



#### 2 COMN1<>RS-232 Interface (3-wire model):

The connection mode of this interface is cross connect,when connecting,the connection mode is:

RXD:UART port receiver connect to external UART sender (TXD)

TXD:UART port sender connect to external UART receiver (RXD)

GND:GND connect to GND,COMN0 and COMN1 shares GND

## 3/4 COMN2/3<>RS-485/422 Multiplexing interface:

When used as RS-485,the connection mode is direct connection:

T+/A: RS-485A Signal(differential positive signal), A connect to A

T-/B: RS-485B Signal (differential negative signal), B connect to B

R-/R+ floating

When used as RS-422, the connection mode is cross-connect:

T+: RS-422 sending positive signal, T+ connect to R+

T-: RS-422 receiving negative signal, R- connect to T
R+: RS-422 receiving negative signal, R+ connect to T+

# 5 USB interface (USB\_B type):

Connect to the computer via a USB cable to power and communicate with the device

#### 6 LED status indication:

Power: Power LED(red)





EVC8024 port sending status indication: COMNX(blue) (X means 0-3)

EVC8024 port receiving status indication: COMNX(red) (X means 0-3)

# **5 Method to Check Computer Serial Port**

COMN0,COMN1,COMN2,COMN3 represent TTL,RS-232,RS-485/422,RS-485/422.If the computer shows COM5,COM6,COM7,COM8,then COM5 is TTL,COM6 is RS-232,COM7 is RS-485/422,COM8 is RS-485/422,and so on.

#### 6 Items list:

- EVC8024 USB<>TTL/RS-232/dual RS-485/422 Magnetic coupling isolation converter
- High-quality USB square-port cable
- Driver CD
- Instructions