

## USB-232-2

USB To RS-232 Converter – 9 Pin

**Datasheet Revision 2.7** 

## SERIALCOMM.COM

### **GENERAL FEATURES:**

- Plug-and-Play (hot-pluggable)
- USB 1.1 and 2.0 compatible
- Port powered no external power needed
- Supports 300 baud to 460,800 baud rates
- Supports all RS-232 signals: TX, RX, RTS, CTS, DTR, DSR, RI and GND
- 3 feet (1m) cable for convenience
- Transmit/Receive LED indicators
- Data direction auto-turnaround no flow control necessary
- Internal 128/385 byte TX / RX buffers
- No IRQs, IO, DMA required. No IRQ conflicts
- Supports remote wakeup and power management
- Easy to install included drivers
- Built-in surge and static protection
- 5 Year manufacturer's warranty
- CE, FCC, RoHS and REACH certified



## **DESCRIPTION:**

PIN #

The SerialComm USB-232-2 is a bi-directional USB-powered USB to RS-232 converter which makes a full-duplex RS-232 port available to a PC via the USB port. The USB-232-2 has a DB9 male connector on the RS-232 serial port, and a USB type A female on the USB port. The adapter is powered from the USB port; no external power is required.

The USB-232-2 uses the latest FTDI chipset and is fully compatible with Windows 10 32/64, Windows 8 32/64, Windows 7 32/64, Vista 32/64, Server 2003, Server 2008, Server 2008 R2, XP 32/64, 2000 98Se, CE, Mac 8/9/x, Linux.

ТΧ

2

8

RX

3

GND

5

# CERTIFICATIONS:



#### PINOUT CONFIGURATION: RS-232 SIDE – DB9 MALE

1

SIGNAL DCD DTR DSR RTS CTS

6

7

4



### **SPECIFICATIONS:**

COMMUNICATION	
STANDARDS:	USB 2.0 and 1.1 Standards - EIA/TIA RS-232C Standard
OPERATING SYSTEM:	Windows 10 (32/64), Windows 8.1 (32/64), Windows 8
	(32/64), Windows 7 (32/64), Vista (32/64), Server 2012,
	Server 2008 R2, Server 2008, Server 2003, XP (32/64),
	2000, 98Se, CE, Mac 8/9/X, Linux and Android
BAUD RATES:	From 300 bps to 460,800 bps
CONNECTOR TYPES:	USB Side: Type A Female and RS-232 Side: DB9 Male
DISTANCE:	USB Side: 10ft (3m) and RS-232 Side: 16 ft (5m)
LED INDICATIONS:	RS-232 TX (Red) and RX (Green)
DRIVERS:	FTDI drivers are included in package
ELECTRICAL	
POWER SOURCE:	Port Powered From USB Port
CURRENT CONSUMPTION:	Less Than 100 mA
STATIC PROTECTION:	15KV Electric Static Discharge (ESD) Protection
SURGE PROTECTION:	600W Surge Protection
CONVERSION IC:	FTDI FT232RL
MECHANICAL	
WEIGHT:	2.0oz (58 grams)
DIMENSIONS:	RS-232 Housing: 2.33" X 1.42" X 0.58"
	(59.3 mm X 36.1 mm X 14.7 mm)
	Cable Length: 3 ft (1m)
	ENVIRONMENTAL
OPERATING TEMP.:	14° F to 140° F (-10°C to 60° C)
STORAGE TEM P:	-40° F to 185° F (-40°C to 85° C)
<b>OPERATING HUMIDITY:</b>	5% To 95% - No Condensation
QUALITY	
PRODUCT SAFETY:	CE, FCC, RoHS and REACH Third-part Certified
QUALITY MANAGEMENT:	Manufactured and Distributed to ISO 9001:2015 QMS
MEAN TIME BEFORE FAILURE:	427,056 Hours
RELIABILITY:	Low Failure Rate – 99+% Reliability Since Inception
WARRANTY:	5 Year Replacement Warranty

### **TROUBLESHOOTING INSTRUCTIONS:**

Using one USB-232-2 unit:

- 1. Perform a loop back test on one unit:
  - a) Connect the TX to RX on the RS232 port.
  - b) Connect the USB connector on the cable to the USB port of the computer.
  - c) Install the USB / RS232 FTDI driver on the computer per instructions provided.
  - d) Running a hyper terminal program on the PC, send ASCII characters to the USB-232-2 converter from one PC port, and check that the characters are received at the same PC port. This tests that the transmit and receive functions of the USB-232-2 unit is working properly.
  - e) When there is constant RX data you should see the GREEN light blink. When there is constant TX data you should see the RED light blink.

Using two USB-232-2 units:

- 1. Perform a loop back test on two units:
  - a) Connect the two TX to RX and RX to TX on two USB-232-2 RS-232 ports. Or connect TX to TX and RX to RX with a null modem.
  - b) Connect the USB connectors on the cables to two USB ports on the computer.
  - c) Install the USB / RS232 FTDI driver on the computer per instructions provided.
  - d) Running hyper terminal programs on both PCs, send ASCII characters to the USB-232-2 converter from one PC port, and check that the characters are received at the 2<sup>nd</sup> PC port. Repeat the test in the opposite direction. This tests that the transmit and receive functions of both USB-232-2 units are working properly.
  - e) The GREEN light should flash when there is RX data and RED when there is TX data.