

USB to RS485 Converter, 5V Output, 6 KV Surge Protection / 3 KV Isolation

This USB to RS485 Adapter is a basic USB-powered converter designed to bridge USB hosts with RS485 networks in industrial environments. This compact yet powerful device delivers reliable RS485 communication with 6 kV three-level lightning protection and robust USB port protection, making it ideal for industrial automation, sensor networks, and multi-node serial systems.

Powered directly by a USB port (no external power required), the adapter features plug-and-play compatibility with standard serial software and supports long-distance, multi-point RS485 communication.

This converter has an AUX terminal (VCC and GND) which can be used for powering a low-voltage (5V) device. The amperage depends which type of USB the converter is connected to (USB 2.0 or 3.0).



SPECIFICATIONS	
Part number	FCT-2101-B
Operating system	Windows 11/10/8.1/8/7/VISTA/XP/2000/98, Server 2022/2019/2016/2012/2008/2003 -32/64bit, Microsoft WHQL/HCK Certified
Processor	CH340
Power	5VDC provided by USB port
Serial interface	RS485 2-wire half-duplex, screw terminals, A, B, signal GND, GND and VCC
Compatible with	Modbus RTU/ASCII, BACnet
Bias resistors	Yes
USB interface	Standard Type B Female. Static protection $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact), EFT protection 40A(5/50ns), surge 5A(8/20us). 200mA self-recovery fuse (USB)
Indication LEDs	Power, Send and Receive
Baud rate	300 to 921600bps
Parity	None, Odd, Even, Mark, Space
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Flow Control	Hardware automatic control
COM port accessible by	Included virtual COM port drivers
Isolation	RS485 port: GB/T17626.5(IEC61000-4-5), 10/700 μs short circuit, 6KV open circuit peak output voltage
Electrostatic (ESD) protection	15KV/ 600W/ms high voltage protection
Current draw	Static: less than 80mA. Dynamic average: less than 30mA
Dimensions	75 × 47 × 20.5 mm
Cable length	1.5m
Interface compliance	USB1.1,2.0,3.0, EIA/TIA RS-232
Regulatory compliance	FCC, CE and RoHS
Operating temp	-40C to +85C
Warranty	1 year limited warranty

To access technical support, please visit the U.S. Converters website at: www.USconverters.com.

Here you will find: - Latest drivers and updates for download - Technical tips - Documentation -

Configuration support - and much more... Feel free to contact our technical support team at

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