USB to RS-485 Miniature Converters

Models BB-485USBTB-4W-A, BB-485USBTB4WLS-A

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PRODUCT FEATURES

- Connect RS-485 devices to your USB port
- RS-485 data rate up to 921.6 Kbps
- USB 2.0 (12 Mbps) compatible
- Convenient, quick inline installation
- Compact size fits into laptop bags; perfect for field service
- USB port-powered
- High retention USB port holds USB cables securely
- Removable terminal block for easy wiring
- Locked Serial number model version
- USB cable included

ORDERING INFORMATION

Previous model number reference:		MODEL ORDER NUMBER	DESCRIPTION
485USBTB-4W	BB-485USBTB-4W	**BB-485USBTB-4W-A**	USB to RS-485 4-Wire Converter
485USBTB-4W-LS	BB-485USBTB-4W-LS	**BB-485USBTB4WLS-A**	USB to RS-485 4-Wire Converter, Locked Serial Number

Universal Serial Bus (USB) has become the connectivity workhorse of today's PCs, replacing the familiar serial ports. However, many commercial and industrial devices still use the RS-485 interface. To connect these devices to modern PCs, you need a simple and reliable conversion solution.

These USB 2.0 to RS-485 4-wire converters offer this solution in a space saving, USB port-powered package. Model BB-485USBTB4WLS-A features a "locked serial number".

Simply plug the converter in – Windows will find and install the FTDI Virtual COM (VCP) driver software. When installation is complete, the converter will show up as an additional COM port. A USB cable is included.

ACCESSORIES - some sold separately

BB-USBAMBM-3F – 0.9 m (3 ft) USB cable (one included)
BB-USBAMBM-6F – 1.8 m (6 ft) USB cable
BB-TBKT6F – 5-position, 3.5mm, terminal block, pluggable, 8A, 300V

Locked Serial Numbers Explained

Advantech B+B configures single-port USB to serial converters in two ways. In **standard format**, each product has a unique serial number. **"Locked serial" format** uses the same serial number that is associated with a model type.

If your converter will always be used with the same computer, the standard serialized model is all you need. If the converter is shared among several computers, like field service laptops, the locked serial number model lets you plug and play without having to worry about matching the two. Serialized and Lock Serial Number versions sell for the same price.

Description	Serialized	Locked Serial Number
Every unit is assigned a unique COM port	✔	-
Same type model numbers shares the same COM port	-	✔
Ideal applications	Fixed Locations	Field Service

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SPECIFICATIONS

SERIAL TECHNOLOGY	
RS-485	TDA(-), TDB(+), RDA(-), RDB(+), Ground
Connector	Removable terminal block (28 to 16 AWG)
Data Rate	Up to 921.6 Kbps
USB TECHNOLOGY	
Connector	USB Type B female, high retention port (3.4 lb (15N) pull force)
Standard	2.0 (backward compatible)
Data Rate	12 Mbps
POWER	
Source	USB port
Input Voltage	5 VDC
Consumption	~ 0.5 W (low power device - draws less than 100 mA)
SOFTWARE	
Driver	FTDI Virtual COM Port (VCP) Driver
O/S	Windows 98, ME, 2000, XP, Vista, 7 (32/64), 8 (32/64), 10
MECHANICAL	
Dimensions	6.5 x 3.2 x 1.6 cm (2.6 x 1.3 x 0.6 in)
Enclosure	In-line mounted, plastic
Weight	104.3 g (0.23 lb) with USB cable
ENVIRONMENTAL	
Operating Temperature	0 to +70 °C (+32 to +158 °F)
Storage Temperature	-40 to +85 °C (-40 to +185 °F)
Operating Humidity	0 to 95% (non-condensing)

MEANTIME BETWEEN FAILURES (MTBF)	
MTBF	1869313 hours
MTBF Calc. Method	MIL 217F Parts Count Reliability Prediction
APPROVALS, DIRECTIVES, STANDARDS	
Approvals	FCC, CE
CE - Directives	2014/30/EU Electromagnetic Compatibility Directive 2011/65/EU amended by (EU) 2015/863 Reduction of Hazardous Substances Directive (RoHS) 2012/19/EU Waste Electrical and Electronic Equipment (WEEE)
CE - Standards	EN 55032:2015 Class B Electromagnetic Compatibility of Multimedia Equipment – Emission Requirements EN 55024:2010 Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement
Standards - other	EN 61000-6 – Generic Immunity Standard for Residential, Commercial and Light-industrial Environments

MECHANICAL DIAGRAM