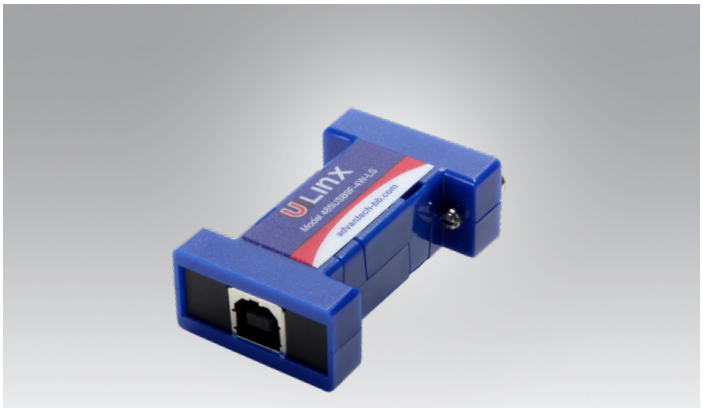
BB-485USB9F-4W
BB-485USB9F-4W-LS

USB to RS-485 Miniature Converters



Features

- Connect RS-485 devices to your USB port
- Data rates: 921.6 kbps (RS-485); 12 Mbps (USB)
- Quick, convenient in-line installation
- USB port powered
- USB 2.0 (12 Mbps) compatible
- Small – fits easily into laptop bag; perfect for field service applications
- (1) USB cable included
- Locked Serial Number version (BB-485USB9F-4W-LS)

Introduction

Universal Serial Bus (USB) has become the connectivity workhorse of today's PCs, replacing the familiar serial port. 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. Models BB-485USB9F-4W and BB-485USB9F-4W-LS offer this solution in a space saving, USB port powered package.

Simply install the drivers and plug the converter into an available USB port on your computer or USB hub. The device will show up as an additional COM port in the Windows Device Manager which is fully compatible with your Windows applications. A one meter USB cable is included. Locked serial number versions are also available.

BB-485USB9F-4W-LS
Locked Serial Numbers Explained

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

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.

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

Note: Serialized and Lock Serial Number versions sell for the same price.

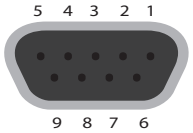
Ordering Information

Model No.	Description
BB-485USB9F-4W	USB to RS-485 4-Wire Converter
BB-485USB9F-4W-LS	USB to RS-485 4-Wire Converter – with Locked Serial Number

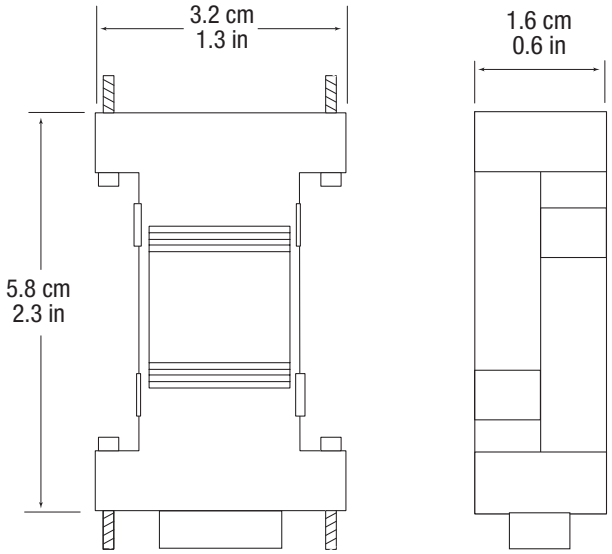
Accessories – Sold Separately

BB-USBAMBM-3F – USB cable, 0.91 m (3 ft), Type A male to Type B male (one included)
BB-USBAMBM-6F – USB cable, 1.83 m (6 ft), Type A male to Type B male

DB9 Female Connector Pinout	
Pin	**Signal**
1	Not Used
2	RDA(-)
3	TDB(+)
4	Ground
5	Not Used
6	Ground
7	RDB(+)
8	TDA(-)
9	Not Used



Mechanical Diagram



Specifications

Serial Technology	
RS-485 Connector	DB9 female
RS-485 4-Wire	TDA(-), TDB(+), RDA(-), RDB(+), Ground
Data Rate	Up to 921.6 kbps
USB Technology	
USB Connector	USB Type B female
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 CD	Windows XP, 7 (32/64 bit), 8 (32/64 bit), 8.1 (32/64), 10 (32/64)
Mechanical	
Dimensions	5.8 x 3.2 x 1.6 cm (2.3 x 1.3 x 0.6 in)
Enclosure	Plastic
Mounting	In-line installation
Weight	4.3 g (0.23 lb) with included 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
Calculation Method	Parts Count Reliability Prediction
Regulatory – Approvals / Standards / Directives	
Approvals	FCC, CE
CE - Directives	2014/30/EU – Electromagnetic Compatibility Directive (ECD) 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	**EMC:** EN 55032:2015 Class B Electromagnetic Compatibility of Multimedia Equipment – Emission Requirements EN 55024:2010 Information Technology Equipment – Immunity Characteristics – Limits and M ethods of Measurement
Other Standards	EN 61000-6-1 - Generic Immunity Standard for Residential, Commercial and Light-Industrial Environments