

## USB to RS-485 Mini-Converters

485USB9F-2W & 485USB9F-4W



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. The 485USB9F-2W and 485USB9F-4W offer this solution in a space saving, USB Port powered package.

Simply install the drivers supplied on CD ROM 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. Choose the 485USB9F-2W for RS-485 2-wire applications or the 485USB9F-4W for RS-485 4-wire applications. Locked serial number versions are also available. A one meter USB cable is included.

#### **PRODUCT FEATURES**

- Connect RS-485 Devices to your USB Port
- Perfect for Field Service Applications
- Small Fits easily into any laptop bag
- USB Port Powered
- USB 2.0 (12 Mbps) Compatible
- RS-485 Data rates up to 921.6 Kbps
- Supports Windows 98, ME, 2000, XP, Vista, 7 (32/64 bit), 8 (32/64 bit)

#### **ORDERING INFORMATION**

MODEL NUMBER	DESCRIPTION
485USB9F-2W	USB to RS-485 2-Wire Converter
485USB9F-4W	USB to RS-485 4-Wire Converter
485USB9F-2W-LS	USB to RS-485 2-Wire Converter (Locked Serial Number)
485USB9F-4W-LS	USB to RS-485 4-Wire Converter (Locked Serial Number)

#### ACCESSORIES

USBAMBM-3F - 3 ft. (1 M) USB Cable (One Included) 7372 - Replacement TB (One Included) Contact Customer Service for ordering information.



## IN THE FIELD

Monitoring Laboratory Equipment Industry: Industrial Automation Product: USB Miniature Converter



485USB9F-2W Carrier data charges

www.bb-elec.com/

USBI ab

## Locked Serial Numbers Explained

We configure our 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.

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

When ordering Locked Serial Number versions, add a "-LS" to the item number. Serialized and Lock Serial Number versions sell for the same price.

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#### SPECIFICATIONS

SERIAL TECHNOLOGY	1
RS-485 2-Wire	Data A(-), Data B(+), Ground
RS-485 4-Wire	TDA(-), TDB(+), RDA(-), RDB(+), Ground
Connector	DB9 Female
Data Rate	Up to 921.6 Kbps
USB TECHNOLOGY	
Connector	USB Type B Female
Standard	2.0 (Backward Compatible)
Data Rate	12 Mbps
POWER	
Source	USB Port
Input Voltage	5 VDC
Consumption	$\sim 0.5$ W (Low power device, draws less than 100 mA)
SOFTWARE	
Driver CD	Windows 98, ME, 2000, XP, Vista, 7 (32/64 bit), 8 (32/64 bit)
MECHANICAL	
Dimensions	5.8 x 3.2 x 1.6 cm (2.3 x 1.3 x .6 in)
Enclosure	In-line mounted, plastic
Weight	0.23 lbs (104.3 g) with USB Cable
ENVIRONMENTAL	
Operating Temp	32 to 158°F (0 to 70 °C)
Storage Temp	-40 to 185 °F (-40 to 85 °C)
Op Humidity	0 to 95 % (Non-condensing)
MTBF 2-Wire	2130833 hours
MTBF 4-Wrie	1869313 hours
MTBF Method	Parts Count Reliability Prediction
REGULATORY	
Approvals	FCC, CE

# APPROVALS / CERTIFICATIONS Emissions EN 55022: 2010 + AC:2011 Class B Emissions CE EN 61000-6-1:2007 Generic Standards for Residential, Commercial and Light-Industrial Environments EN 61000-4-2: 2009 Electro-Static Discharge (ESD) EN 61000-4-3: 2006 +A1 +A2 +IS1 Radiated Field Immunity (RFI) Electrical Fast Transients-Burst Immunity (EFT

EN 61000-4-6: 2009 Conducted Immunity

#### PINOUT:

#### **DB9 FEMALE CONNECTOR**



#### 9876

PIN	485USB9F-2W	485USB9F-4W
1	Not Used	Not Used
2	Data A(-)	RDA(-)
3	Data B(+)	TDB(+)
4	Ground	Ground
5	Not Used	Not Used
6	Ground	Ground
7	Data B(+)	RDB(+)
8	Data A(-)	TDA(-)
9	Not Used	Not Used

#### **MECHANICAL DIAGRAM**



