# **USB to RS-485 Miniature Converters**

485USB9F-2W, 485USB9F-2W-LS, 485USB9F-4W, 485USB9F-4W-LS





#### **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
- · Locked Serial Number versions
- Supports Windows XP, 7 (32/64 bit), 8 (32/64 bit), 8.1 (32/64 bit), 10 (32/64bit)

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. The 485USB9F-2W-x and 485USB9F-4W-x 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. Choose the 485USB9F-2W-x for RS-485 2-wire applications or the 485USB9F-4W-x for RS-485 4-wire applications. A one meter USB cable is included. Locked serial number versions are also available.

#### **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. USB Cable (one included)



### IN THE FIELD

Monitoring Laboratory
Equipment

Industry: Industrial Automation Product: USB Miniature Converter

# **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	<b>V</b>	-
Same type model numbers shares the same COM port	-	V
Ideal applications	Fixed Locations	Field Service

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

All product specifications are subject to change without notice.

485USB9F-2W-x 485USB9F-4W-x 1017ds



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### **SPECIFICATIONS**

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SERIAL TECHNOLOGY				
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	~ 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	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)			
Operating Humidity	0 to 95 % (non-condensing)			
MTBF 2-Wire	2130833 hours			
MTBF 4-Wire	1869313 hours			
MTBF Method	Parts Count Reliability Prediction			
REGULATORY				
Approvals	FCC, CE			

APPROVALS / CERTIFICATIONS				
EU	2014/30/EU	Electromagnetic Compatibility Directive		
	2011/65/EU	Reduction of Hazardous Substanes Directive		
EMC	EN 55022:2010 + AC	Information Technology Equipment - Radio Disturbance Characteristics - Limits and Methods of Measurement		
	EN 61000-6-1	Generic Immunity Standard for Residential, Commercial and Light-Industrial Environments		
	EN 61000-4-2	Electro-Static Discharge (ESD) Immunity		
	EN 61000-4-3	Radiated Field Immunity (RFI)		
	EN 61000-4-4	Electrical Fast Transients (EFT) Burst Immunity		
	EN 61000-4-5	Surge Immunity		
	EN 61000-4-6	RF Conducted Immunity		

### **PINOUT: DB9 FEMALE CONNECTOR**



	40-110-0-1-014	40-110-0-114
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**



