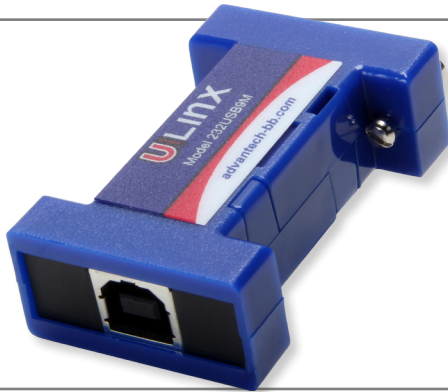


# USB to RS-232 Miniature Converters

Models 232USB9M, 232USB9M-LS



## PRODUCT FEATURES

- Connect RS-232 devices to your USB port
- RS-232 data rates up to 921.6 Kbps
- In-line installation
- FCC, CE approved
- USB port powered
- (1) USB cable included
- USB 2.0 (12 Mbps) compatible
- Perfect for field service applications
- Locked serial number option (Model# 232USB9M-LS)

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-232 interface.

To connect these devices to modern PCs, you need a simple and reliable conversion solution. Model 232USB9Mx offers this solution in a compact, 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. Locked serial number version is also available. A USB cable is included.

## ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
<b>232USB9M</b>	USB to RS-232 Miniature Converter
<b>232USB9M-LS</b>	USB to RS-232 Miniature Converter (Locked Serial Number)

## ACCESSORIES

- USBAMB-3F** - USB Cable, 0.91 m (3 ft), one cable included with converter  
**9PAMF6** - Serial Cable – 1.8 m (6 ft), DB9 male to DB9 female

## 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 an "-LS" to the item number. Serialized and Lock Serial Number versions sell for the same price.

All product specifications are subject to change without notice.  
 232USB9M-232USB9M-LS\_1418ds

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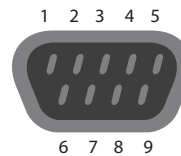


## SPECIFICATIONS

SERIAL TECHNOLOGY	
RS-232	TD, RD, DCD, DTR, GND, SDR, RTS, CTS, RI
Connector	DB9 Male (DTE)
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 98, ME, 2000, XP, Vista, 7 (32/64 bit), 8 (32/64 bit), 10 (32/64 bit)
MECHANICAL	
Dimensions	5.8 x 3.2 x 1.6 cm (2.3 x 1.3 x 0.6 in)
Enclosure	In-line mount, plastic
Weight	104.3 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)
MTBF	1946086 hours
MTBF Method	MIL 217F Parts Count Reliability Prediction

APPROVALS, DIRECTIVES, STANDARDS	
Approvals	FCC, CE
2014/30/EU	Electromagnetic Compatibility Directive
2011/65/EU	Reduction of Hazardous Substances Directive (RoHS)
2012/19/EU	Waste Electrical and Electronic Equipment Directive (WEEE)
EN 55032 Class B	Electromagnetic Compatibility of Multimedia Equipment - Emissions Requirements
EN 61000-6-1	Generic Immunity Standard for Residential, Commercial and Light-industrial Environments
EN 61000-4-2	ESD Immunity
EN 61000-4-3	Radiated Immunity
EN 61000-4-4	EFT/Burst Immunity
EN 61000-4-6	RF Conducted Immunity

## PINOUTS: RS-232 DB9 MALE DTE CONNECTOR



PIN	DIRECTION	SIGNAL NAME
1	Input	DCD (Receive Line Signal Detector)
2	Input	RD (Receive Data)
3	Output	TD (Transmit Data)
4	Output	DTR (DTE Ready)
5	N/A	SG (Signal Ground)
6	Input	DSR (DCE Ready)
7	Output	RTS (Request to Send)
8	Input	CTS (Clear to Send)
9	Input	RI (Ring Indicator)

## MECHANICAL DIAGRAM

