

# USB to RS-232 Converter

– 2kV isolation, high retention USB port  
Models BB-USO9ML2-A, BB-USO9ML2-LS-A



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## PRODUCT FEATURES

- USB to RS-232 Data Conversion
- 2 kV Isolation with 4 kV Contact, 8 kV Air ESD Protection
- USB 2.0 Full Speed Compatible (12 Mbps)
- RS-232 Data Rates Up to 460.8 kbps
- Compact In-Line Case
- USB Bus Powered
- High retention USB port for secure cable connections
- One USB cable included (0.9 m / 3 ft)
- Locked Serial Number model option

This compact, isolated USB to RS-232 converter allows you to add an RS-232 port to your USB only PC. Built to rugged specifications with 2 kV isolation, it will protect your PC from hazardous ground loops. The compact size makes it perfect for field service use but, it is also suitable for instrumentation and laboratory applications. Full speed (12 Mbps) USB 2.0 support allows connectivity with modern computer technology.

The RS-232 port is a DB9 male connector wired as a DTE with full hardware handshake support. It can handle standard RS-232 data rates up to 460.8 kbps.

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. Drivers supports platforms up to Windows 8 and 10 (32 / 64 bit). Also includes one USB cable.

## ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
<b>BB-USO9ML2-A</b>	USB to RS-232 Converter, Isolated
<b>BB-USO9ML2-LS-A</b>	USB to RS-232 Converter, Isolated - Locked Serial Number version of BB-USO9ML2-A

## ACCESSORIES - sold separately

- BB-USBAMB-3F** - USB cable, Type A Male - Type B Male, 0.9 m (3 ft) *(one included)*
- BB-USBAMB-6F** - USB cable, Type A Male - Type B Male, 1.8 m (6 ft)
- BB-9PAMF6** - Serial cable, DB9 male - DB9 female, 1.8 m (6 ft)

## Locked Serial Numbers Explained

B+B SmartWorx 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.

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.

All product specifications are subject to change without notice.  
USO9ML2-A\_USO9ML2-LS-A\_3918ds



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## SPECIFICATIONS

SERIAL TECHNOLOGY	
RS-232	TD, RD, RTS, CTS, DTR, DSR, DCD, GND
Connector	DB9 Male
Data Rate	460.8 kbps
Isolation	2 kV
USB TECHNOLOGY	
USB Compatibility	1.1 and 2.0 (at full speed)
Speed	12 Mbps (full speed)
Connector	USB Type B female, high retention
POWER	
Source	USB Bus Powered
Power Consumption	Low Power Device (Less than 100 mA)
LED INDICATORS	
TD / RD (RS-232)	Red LED
SOFTWARE	
Driver	FTDI Virtual COM Port (VCP) Driver
O/S	Windows 2000, XP (32/64 bit), Vista (32/64 bit), 7 (32/64 bit), 8 (32/64 bit), 10 (32/64 bit), 2003 & 2008 Server (32/64 bit)
MECHANICAL	
Dimensions	7.7 x 4.3 x 2.3 cm (3.0 x 1.7 x 0.9 in)
Enclosure	IP30, Plastic
Weight	0.18 kg (6.4 oz)

MEANTIME BEFORE FAILURE (MTBF)	
MTBF	247713 hours
MTBF Calc. Method	MIL 217F Parts Count Reliability
ENVIRONMENTAL	
Operating Temperature	0 to +70 °C
Storage Temperature	-40 to +85 °C
Operating Humidity	0 to 95%, non-condensing
APPROVALS / CERTIFICATIONS	
FCC, UL508	
CE - Directives	2014/30/EC – Electromagnetic Compatibility Directive 2011/65/EU – Reduction of Hazardous Substances Directive (RoHS) 2012/19/EU – Waste Electrical and Electronic Equipment (WEEE)
CE - Standards	EN 55032: Class B – Electromagnetic Compatibility of Multimedia Equipment - Emission Requirements EN 55024 – Information Technology Equipment - Immunity Characteristics EN 61000-6-1 – Generic Immunity Standard for Residential, Commercial and Light-Industrial Environments EN 61000-6-3 +A1 – Generic Emissions Standard for Residential, Commercial and Light-Industrial Environments (Class B)

## MECHANICAL DIAGRAM

Dimensions - inches

