

USB to RS-232 Miniature Converters

Models BB-232USB9M, BB-232USB9M-LS



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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
- USB 2.0 (12 Mbps) compatible
- Perfect for field service applications
- (1) USB cable included
- Locked serial number option (Model# BB-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 BB-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 |
|-----------------------|--|
| BB-232USB9M | USB to RS-232 Miniature Converter |
| BB-232USB9M-LS | USB to RS-232 Miniature Converter (Locked Serial Number) |

ACCESSORIES - sold separately

BB-USBAMB-3F - USB Cable, 0.91 m (3 ft) *(one cable included with converter)*

BB-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.
BB-232USB9M-BB-232USB9M-LS_1720ds



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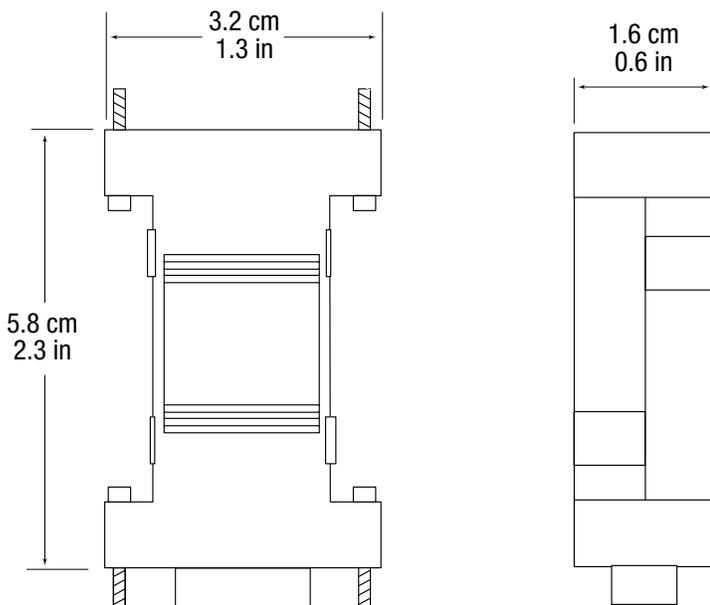


SPECIFICATIONS

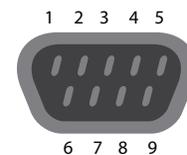
| SERIAL TECHNOLOGY | |
|-------------------|---|
| RS-232 | TD, RD, DCD, DTR, GND, SDR, RTS, CTS, RI |
| Connector | DB9 Male (DTE) |
| Data Rate | Up to 921.6 Kbps |
| USB TECHNOLOGY | |
| Connector | USB Type B Female |
| Standard | 2.0 (backward compatible) |
| Data Rate | 12 Mbps |
| FIFO BUFFERS | |
| FIFO TX | 128 bytes Data from USB Data OUT endpoint is stored in FIFO TX buffer and removed from the buffer to UART Transmit Register under control of UART FIFO controller. |
| FIFO RX | 256 bytes Data from UART Receive Register is stored in FIFO RX buffer prior to being removed by the SIE on a USB data request from the device Data IN endpoint. |
| 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 |
| CE - Directives | 2014/30/EU - Electromagnetic Compatibility Directive 2011/65/EU amended by (EU) 2015/863 - Reduction of Hazardous Substances Directive (RoHS) 2012/19/EU - Waste Electrical and Electronic Equipment Directive (WEEE) |
| CE - Standards | EN 55032 Class B - Electromagnetic Compatibility of Multimedia Equipment - Emissions Requirements EN 55024:2010 Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement |
| EN 61000-6-1 | Generic Immunity Standard for Residential, Commercial and Light-industrial Environments |

MECHANICAL DIAGRAM



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) |

