

BB-US09ML2-A BB-US09ML2-LS-A

**USB to RS-232 Converter -
2kV isolation, high retention USB port**



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
- Locked Serial Number model option

Specifications

Serial Technology

- **RS-232** TD, RD, RTS, CTS, DTR, DSR, DCD, GND
- **Connector** DB9 Male (DTE)
- **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** 76.2 x 42.7 x 20.1 mm
- **Enclosure** IP30, Plastic
- **Weight** 0.18 kg

Meantime Between Failures (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, Standards, Directives

- **FCC**
- **CE - Directives** 2014/30/EC – Electromagnetic Compatibility Directive
2011/65/EU amended by 2015/863/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)

Ordering Information

- **BB-US09ML2-A** USB to RS-232 Converter, Isolated
- **BB-US09ML2-LS-A** USB to RS-232 Converter, Isolated - Locked Serial Number version of BB-US09ML2-A

Accessories – Sold Separately

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

Dimensions

Unit: mm

