

Isolated USB/RS-232 Converters

US09ML2DR-x



PRODUCT FEATURES

- Connects 1 or 2 RS-232 devices to your USB port
- 3000 V RMS port-to-port optical isolation
- 15 KV ESD surge protection
- USB port powered
- RS-232 data rates up to 460.8 kbps
- LEDs indicate data flow on RS-232 ports
- High retention USB interface ensures reliable connection

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 serial interfaces. To connect these devices to modern PCs, you need a simple and reliable conversion solution.

The US09ML2DR USB/RS-232 converter series offers this solution in an industrial DIN mount enclosure. Connect legacy RS-232 devices to a USB port and gain 3000 V RMS isolation from voltage spikes and ground loops.

These devices are perfect for industrial automation, SCADA, point of sale, or medical. Simply plug the converter into an available USB port on your computer or USB hub and install the drivers supplied on CD ROM. The device will show up as additional COM ports in the Windows Device Manager which are fully compatible with your Windows applications. A one meter USB cable is included.

ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
US09ML2DR	Isolated USB to RS-232 Converter, 1 port
US09ML2DR-2	Isolated USB to RS-232 Converter, 2 port
US09ML2DR-LS	Locked Serial Number version of US09ML2DR

ACCESSORIES

- USBAMB-3F - 1 m (3 ft.) USB cable (one included)
- USBAMB-6F - 2 m (6 ft.) USB cable
- 9PAMF6 - 2 m (6 ft.) DB9 male to DB9 female serial cable
- 9PAMF10 - 3 m (10 ft.) DB9 male to DB9 female serial cable
- 232NM9 - 3 m (6 ft.) DB9 female to DB9 female null modem cable
- 232NM9MF10 - 3 m (10 ft.) DB9 male to DB9 female null modem cable
- DRPM25 - Panel mount adapter

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

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SPECIFICATIONS

SERIAL TECHNOLOGY	
RS-232	DCD, RD, TD, DTR, SG, DSR, RTS, CTS, RI
Connector	DB9 male (DTE)
Data Rate	Up to 460.8 Kbps (maximum)
Isolation	3 KV port-to-port optical isolation
Surge Protection	15 KV ESD
USB TECHNOLOGY	
USB Compatibility	2.0 (backward compatible)
USB Data Rate	12 Mbps
Connector	Type B female, high retention (15 Newtons / 3.4 lbs-force withdrawal)
Driver CD	Windows 2000, XP, Vista, 7 (32/64 bit), 8 (32/64 bit)
POWER	
Source	USB port
Input Voltage	5 VDC
Consumption	Lower power device (<100 mA)
MECHANICAL	
Dimensions	11.8 x 3.0 x 9.0 cm (4.6 x 1.2 x 3.5 in)
Enclosure	IP30 plastic case
ENVIRONMENTAL	
Operating Temperature	0 to 70°C (32 to 158°F)
Operating Humidity	0 to 95% non-condensing
MTBF US09ML2x	118,048 hours
MTBF Calc. Method	Parts Count Reliability Prediction

APPROVALS / CERTIFICATIONS	
Emissions	FCC Class B, CISPR Class B (EN55022:2006)
CE	EN 61000-6-1: 2007 Generic Standards for Residential, Commercial and Light-Industrial Environments
	EN 61000-4-2: 2009 Electro-Static Discharge (ESD)
	EN 61000-4-3: 2006 +A1 +A2 +IS1 Radiated Field Immunity (RFI)
	EN 61000-4-4: 2012 Electrical Fast Transients-Burst Immunity (EFT)
	EN 61000-4-6: 2009 Conducted Immunity

INFORMATION – FCC RULES	
This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:	
(1) This device may not cause harmful interference.	
(2) This device must accept any interference that may cause undesired operation.	

MECHANICAL DIAGRAM - US09ML2DR

