

Isolated USB to 2 or 4 Port RS-232 Converter

Models: USO9ML2-2P & USO9ML2-4P

Features

- ✓ Connects multiple RS-232 devices to your USB Port
- ✓ 2000 V RMS Port-to-Port Optical Isolation
- ✓ 15 KV ESD Surge Protection
- ✓ USB Port Powered or External Power
- ✓ Supports USB 2.0 (Backward Compatible)
- ✓ RS-232 Data Rates up to 460.8 kbps
- ✓ LED's to indicate data flow on RS-232 ports
- ✓ High retention USB interface ensures a reliable connection
- ✓ Automatic Configuration on Windows 2000, XP, Vista, 7

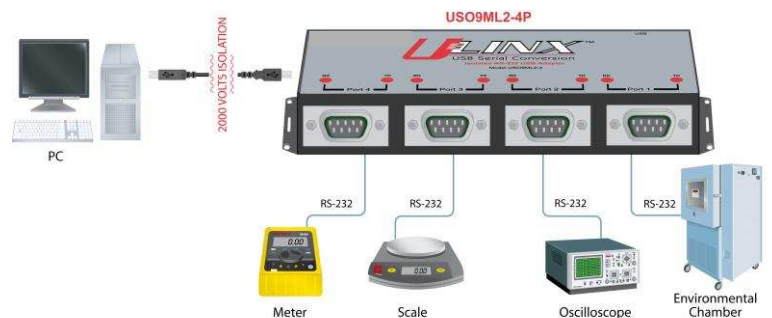


Functional Description

Connect legacy RS-232 devices to a USB port and gain 2000 V RMS isolation from voltage spikes and ground loops. 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 and provide protection from electrical transients, you need a simple and reliable conversion solution. The USO9ML2-2P and USO9ML2-4P offer this solution. 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 |
|--------------|--|
| USO9ML2-2P | Isolated USB to 2 Port RS-232 Converter |
| USO9ML2-4P | Isolated USB to 4 Port RS-232 Converter |
| Accessories | |
| USBAMBM-3F | 3 ft (1 M) USB Cable (One Included) |
| USBAMBM-6F | 2 m (6ft) USB Cable |
| 9PAMF6 | 2 m (6 ft) DB9 Male to DB9 Female Cable |
| 9PAMF10 | 3 m (10 ft) DB9 Male to DB9 Female 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 |
| MDR-20-24 | DIN Rail Mount, 24 VDC, 1 A Power Supply |
| 12DC1AST | DC Power supply Unregulated 12VDC@1000mA |



Specifications

Serial Technology

| | |
|----------------------|-------------------------------|
| RS-232 Configuration | DTE |
| RS-232 Connector | DB9 Male (DTE) |
| Data Rate | 460.8 kbps (max) |
| Isolation | 2000 V (Port-to-Port) Optical |
| Surge Protection | 15 KV ESD |

USB Technology

| | |
|-----------|--|
| Connector | USB Type B Female, high retention Withdrawal > 15 N |
| Standard | 1.1 and 2.0 Compatible |
| Data Rate | 12 Mbps |

Power

| | |
|---------------|---|
| Source | USB Port or External Source |
| Input Voltage | 5 VDC from USB Port or 10 - 30 VDC External Power Supply |
| Consumption | Higher Power Device (>100 mA) USO9ML2-2P: 3 Watts, External Power Supply USO9ML2-4P: 5 Watts, External Power Supply |

Software

| | |
|-----------|----------------------------|
| Driver CD | Windows 2000, XP, Vista, 7 |
|-----------|----------------------------|

Mechanical

| | |
|------------|---|
| Dimensions | 6.5 x 1.2 x 3.1 in (16.4 x 3.0 x 8.0 cm) without Flanges 7.5 x 1.2 x 3.1 in (19.0 x 3.0 x 8.0 cm) with Flanges |
| Weight | 2 Port 0.73 lbs (331.1 g), 4 Port 0.77 lbs (349.3 g) |

Environmental

| | |
|--------------------|------------------------------------|
| Operating Temp | 32 to 158 °F (0 to 70 °C) |
| Storage Temp | -40 to 185 °F (-40 to 85 °C) |
| Operating Humidity | 0 to 95 % (Non-condensing) |
| MTBF (USO9ML2-2P) | 118245 hours |
| MTBF (USO9ML2-4P) | 61861 hours |
| MTBF Method | Parts Count Reliability Prediction |

Regulatory

| | |
|-----------|-------------|
| Approvals | FCC, CE, UL |
|-----------|-------------|

RS-232 Pin-out (DTE / DB9 Male)

| 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) |