

## Isolated USB to 2 or 4 Port RS-422/485

Models: USOPTL4-2P & USOPTL4-4P

### Features

- ✓ Connects multiple RS-422/485 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-422/485 Data Rates up to 921.6 kbps
- ✓ LED's to indicate data flow on RS-232 ports
- ✓ High retention USB interface ensures a reliable connection
- ✓ Removable terminal block on serial ports make wiring easy
- ✓ Automatic Configuration on Windows 98, ME, 2000, XP, and Vista

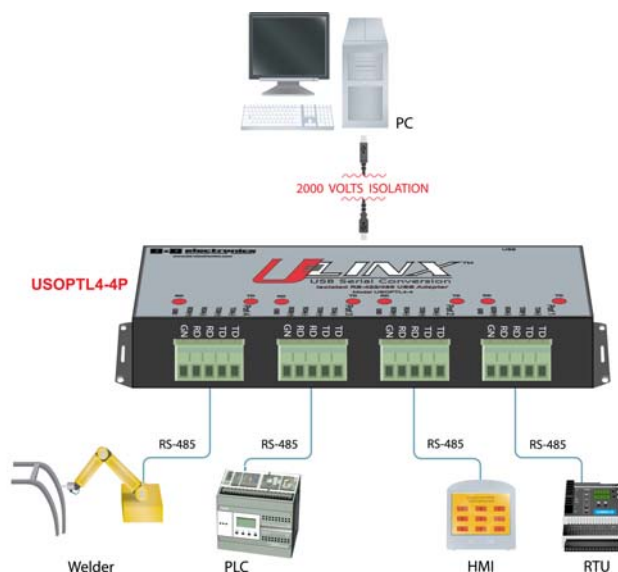


### Functional Description

Connect RS-422 and RS-485 (2-Wire and 4-Wire) 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-422/485 interface. To connect these devices to modern PCs and provide protection from electrical transients, you need a simple and reliable conversion solution. The USOPTL4-2P and USOPTL4-4P offer this solution and are great for any application that requires long range or multi-drop capabilities. Both models offer a high retention USB interface, removable terminal blocks on the serial side and have LED's to indicate data flow. 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                                 |
|--------------------|---|
| USOPTL4-2P         | Isolated USB to 2 Port RS-422/485 Converter |
| USOPTL4-4P         | Isolated USB to 4 Port RS-422/485 Converter |
| <b>Accessories</b> |   |
| USBAMBM-3F         | 3 ft (1 M) USB Cable (One Included)         |
| USBAMBM-6F         | 2 m (6ft) USB Cable                         |
| MDR-20-24          | DIN Rail Mount, 24 VDC, 1 A Power Supply    |
| 12DC1AST           | DC Power supply Unregulated 12VDC@1000mA    |



**Specifications****Serial Technology**

|                       |                               |
|-----------------------|-------------------------------|
| RS-422/485 Connectors | Removable Terminal Blocks     |
| RS-422/485 Data Rate  | 921.6 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)                            |
|               | USOPTL4-2P: 3 Watts, External Power Supply               |
|               | USOPTL4-4P: 5 Watts, External Power Supply               |

**Software**

|           |                                 |
|-----------|---------------------------------|
| Driver CD | Windows 98, ME, 2000, XP, Vista |
|-----------|---------------------------------|

**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 0.75 lbs (340.2 g), 4 Port 0.80 lbs (362.9 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 (USOPTL4-2P)  | 125224 hours                       |
| MTBF (USOPTL4-4P)  | 72749 hours                        |
| MTBF Method        | Parts Count Reliability Prediction |

**Regulatory**

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

**Terminal Board Layout**

| TB Position | Signal Name |
|-------------|-------------|
| 1           | TDA(-)      |
| 2           | TDB(+)      |
| 3           | RDA(-)      |
| 4           | RDB(+)      |
| 5           | Ground      |

**DIP Switch Legend**

| Position                           | OFF     | ON       |
|------------------------------------|---------|----------|
| 1                                  | RS-422  | RS-485   |
| 2                                  | Echo ON | Echo OFF |
| 3                                  | 4-Wire  | 2-Wire   |
| 4                                  | 4-Wire  | 2-Wire   |
| Factory default = all switches off |         |          |

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