



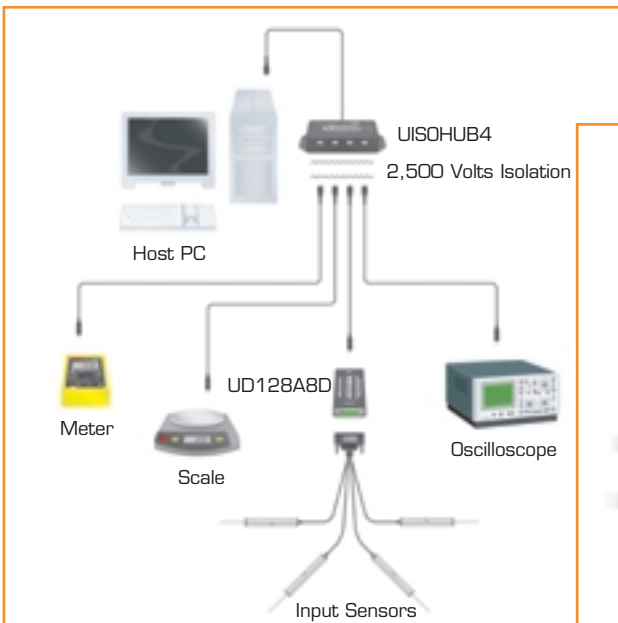
## Universal Serial Bus

Universal Serial Bus (USB) has become the connectivity workhorse of today's PCs, replacing the familiar serial and parallel ports. But many commercial and industrial devices still use RS-232, RS-422 or RS-485 interfaces. To connect these devices to modern PCs you need robust and reliable conversion solutions. At the same time, USB ports are becoming more common on commercial and industrial equipment such as point-of-sale peripherals, medical devices, scientific instrumentation, laboratory equipment and other devices. Sometimes these are used in environments where surges, spikes and ground loops are likely to occur.

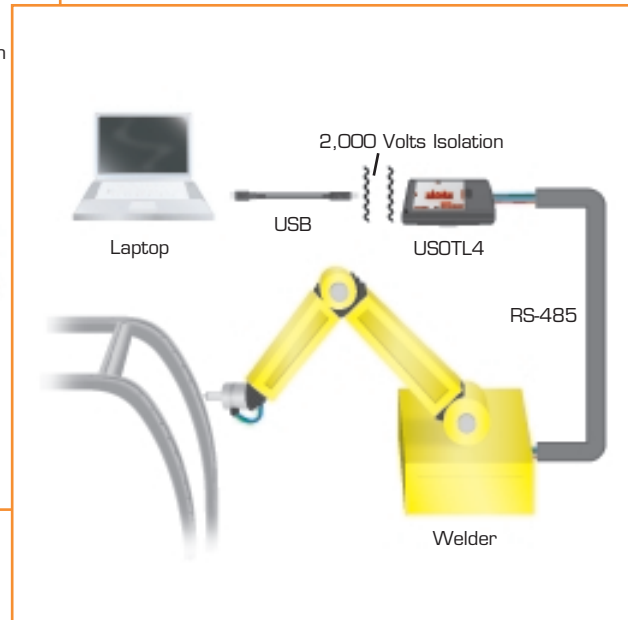
B&B Electronics' USB to RS-232 and RS-422/485 converters provide simple, cost-effective solutions that allow legacy devices to be connected to your PC's USB port. B&B Electronics' isolated USB hub connects multiple USB devices to your PC while protecting it from surges, spikes and ground loops.



The USO9ML2 allows an RS-232 device to connect to a USB port or hub and provides 2000 volts RMS of optical isolation. The USTL4 interfaces your computer's USB port to RS-422/485, providing extended range and multi-drop capability. The USOTL4 performs all the same functions while protecting your PC's circuitry with 2000 volts RMS of optical isolation. The UIISOHUB4 expands your PC's USB port to four USB ports while providing 2500 volts RMS of optical isolation.



*Establish isolated connections from up to four USB equipped devices with a single PC's USB port.*



*Connect PCs or laptops with USB ports to devices with RS-232, RS-422 or RS-485 ports.*



## USTL4 Non-Isolated USB to RS-422/485 Converter

- Extends communication distances and adds multi-drop capability
- Requires no PCI/ISA slots or IRQs
- Plug and Play configuration as an additional COM port
- Configurable for 2/4 wire, full/half duplex operation and Automatic Send Data Control
- LEDs indicate data traffic on TD and RD lines
- No separate power supply needed (supplied from USB bus)
- USB connector is B-male; RS-422/485 connector is a terminal block
- 1m USB cable included
- Dimensions: 5.0 x 2.7 x 0.9 in (12.7 x 6.9 x 2.3 cm)



## USOTL4 Optically Isolated USB to RS-422/485 Converter

- Same features as USTL4 plus 2000 volts RMS optical isolation



## USO9ML2 USB to RS-232 Converter with Optical Isolation

- Allows an RS-232 device to connect to a USB port or hub
- Requires no PCI/ISA slots or IRQs
- Plug and Play configuration as an additional COM port
- 2000 volts RMS optical isolation protects from surges, spikes and ground loops
- Two LEDs indicate data is being transmitted or received
- No separate power supply needed (supplied from USB bus)
- RS-232 port connector is a DB-9 male; USB connector is a USB-B female
- 1m USB cable included
- Dimensions: 3.0 x 0.9 x 1.7 in (7.7 x 2.3 x 4.3 cm)



## UIISOHUB4 USB Optically Isolated 4 Port Hub

- Connect USB devices in commercial and industrial applications
- Expands one USB port to four USB ports
- 2500 volts RMS optical isolation protects from surges, spikes and ground loops
- Supports high and low speed USB peripherals
- Has an attached 1 meter cable on the upstream USB port
- Dimensions: 3.8 x 5.6 x 1.2 in (9.7 x 14.1 x 2.9 cm)