

FEATURES

- RoHS compliant, single-port serial communications adapter for USB 2.0 or 3.0
- Supports all RS-232 signals, including handshaking
- Includes type FT232R UART with 128-byte receive/256-byte transmit FIFO buffers
- Speeds up to 1Mbps asynchronous
- Supports 7 or 8 data bits, 1 or 2 stop bits, and odd / even / mark / space / no parity
- $\pm 15\text{kV}$ ESD Protection (IEC 6100) on RS-232 signals
- All required power drawn from host USB port, no external power adapter required
- Compact, industrial, metal backshell
- Operating temperature of -40° to $+85^{\circ}\text{C}$
- Supported for use in Windows CE

APPLICATIONS

- Scales
- Data entry terminals
- Data acquisition and automation modules
- Transportation



USB-232-IND Pictured

FUNCTIONAL DESCRIPTION

The USB-232-IND is a rugged industrial serial communications adapter designed for use in demanding real-world applications such as transportation, military embedded control systems, remote data acquisition, mobile, and more. This intelligent module provides a cost-effective solution for transferring high-speed asynchronous serial data over USB. The adapter provides easy connectivity between the computer and standard communication ports or remote serial devices. No PC reconfiguration, assignment of IRQs, or jumper settings required. The adapter will be recognized as a USB to Serial Adapter and install in the system as a standard COM port.

ACCESSORIES

The module is available with an optional screw terminal adapter board model ADAP9 to break out signals for ease of connection.

SOFTWARE

The USB-232-IND is a plug-and-play device using the built in OS drivers which allows quick connect or disconnect without having to fumble with locating driver media whenever you need an RS-232 port. The USB-232-IND is supported for use in most USB supported operating systems and includes a free Linux and Windows compatible software package. The software package includes sample programs and source code in C#, Delphi, Visual Basic, and Visual C++ for Windows.

SPECIFICATIONS

Communications Interface

Serial Port: RS-232
 Connector: DB-9 Male
 Character Length: 7 or 8 bits
 Parity: Even, odd, mark, space or none
 Stop Interval: 1 or 2 bits
 Serial Data Rates: 300bps up to 1Mbps asynchronous
 Input/Output Voltage: $\pm 25V$
 Transmitter Output Drive: Up to 60mA, with thermal shutdown
 Receiver Input Sensitivity: $\pm 200mV$
 ESD Protection: $\pm 15kV$ on all signal pins

Bus Type

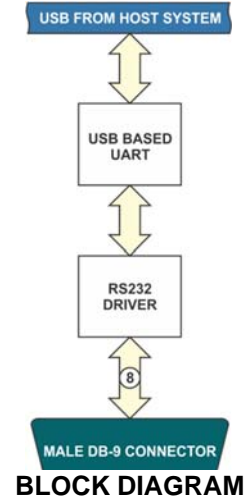
USB 2.0 Full-Speed
 USB 3.0 Compatible

Environmental

Operating Temp: -40° to $+85^{\circ}C$
 Storage Temp: -65° to $+150^{\circ}C$
 Humidity: 5% to 95%, non-condensing
 Power Required: 5VDC at $\sim 12mA$ with no load ($\sim 22mA$ loaded)
 Cable Length: 6 feet
 Backshell Dimensions: 1.236" x 0.657" x 2.094" (31.4mm x 16.7mm x 53.2mm)

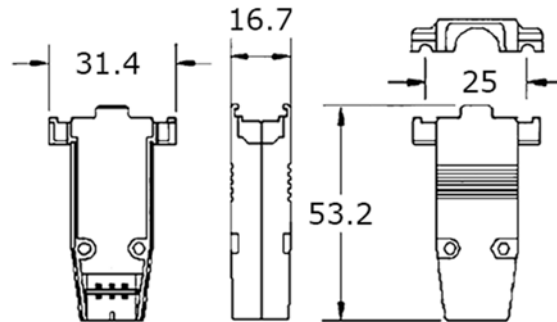
Ordering Guide

USB-232-IND USB to RS-232 industrial serial adapter with screwlocks
 USB-232-IND-S01 USB to RS-232 industrial serial adapter with jackscrews



| PIN | DB9M |
|-----|------|
| 1 | DCD |
| 2 | RX |
| 3 | TX |
| 4 | DTR |
| 5 | GND |
| 6 | DSR |
| 7 | RTS |
| 8 | CTS |
| 9 | RI |

Pinout Table



Units: mm ± 0.5

Backshell Drawing

