UPort® 1150I

1-port RS-232/422/485 USB-to-serial converter with 2 KV isolation

> Compatible with USB 2.0
> 12 Mbps USB data rate
> 15N high retention USB type B connector
> Software selectable RS-232, RS-422, 4-wire RS-485, and 2-wire RS-485
> Drivers provided for Windows, WinCE, and Linux
> 15 KV ESD protection for all serial ports
> 2 KV optical isolation protection
> Full modem status LEDs

Overview

The UPort® 1150I is a USB-to-serial converter with one 3-in-1 RS-232/422/485 serial port, transmission speed up to 921.6 Kbps, and 15 KV ESD protection. For industrial and commercial applications that require enhanced reliability, it is also equipped with 2 KV DC optical isolation protection, providing PCs with both COM port expansion and protection from potentially damaging electrical spikes. Adjustable RS-485 pull high/low resistors are built in for daisy-chained RS-485 networks, allowing engineers to connect to any serial device quickly and easily.

Typical Application—Mini Testers

Many engineers use a combination of USB-to-serial converter plus mini tester to check serial device connections during routine inspections. However, mini testers are inconvenient to use, particularly when you need to connect directly through a device's DB9 connector, and purchasing mini testers for all inspectors in a factory increases the overall operating expense. To get around these problems, Moxa designed the UPort® 1150I, which is an external USB-to-serial converter with 1 RS-232/422/485 DB9 connector and a built-in mini tester. The UPort® 1150I has the following features:

• USB 2.0 compatibility
• RS-232 and RS-422/485 interfaces
• Built-in mini tester function
• Built-in modem status LED indicators for easy diagnosis
• Competitive pricing

Specifications

USB Interface
Compliance: USB 1.0/1.1 compliant, USB 2.0 compatible
Connector: USB type B
Speed: 12 Mbps (Full-Speed USB)

Serial Interface
Number of Ports: 1
Serial Standards: RS-232/422/485
Connector: DB9 male

Serial Line Protection
ESD Protection: 15 KV embedded
Optical Isolation: 2 KV

Performance
Baudrate: 50 bps to 921.6 Kbps

Serial Communication Parameters
Data Bits: 5, 6, 7, 8
Stop Bits: 1, 1.5, 2
Parity: None, Even, Odd, Space, Mark
Flow Control: RTS/CTS, XON/XOFF
FIFO: 64 bytes

Serial Signals
RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422: TxD+(B), TxD-(A), RxD+(B), RxD-(A), GND
RS-485-4w: TxD+(B), TxD-(A), RxD+(B), RxD-(A), GND
RS-485-2w: Data+(B), Data-(A), GND
RS-485 Data Direction: ADDC® (Automatic Data Direction Control)

Driver Support
Operating Systems: Windows 9X/ME/2000, Windows XP/2003/Vista/2008/7 x86/x64, WinCE 5.0/6.0, Linux 2.4.x, 2.6.x, 3.0.x
Note: Please refer to Moxa's website for the latest driver support information.

Physical Characteristics
Housing: SECC sheet metal (1 mm)
Weight:
Product only: 75 g (0.65 lb)
Packaged: 320 g (0.72 lb)
Dimensions: 52 x 80 x 22 mm (2.05 x 3.15 x 0.87 in)

Environmental Limits
Operating Temperature: 0 to 55°C (32 to 131°F)
Storage Temperature: -20 to 70°C (-4 to 158°F)

Ambient Relative Humidity: 5 to 95% (non-condensing)

Standards and Certifications
Safety: UL 60950-1
EMC: CE, FCC
EMI: EN 55022 Class B, EN 61000-3-2, EN 61000-3-3, FCC Part 15 Subpart B Class B
EMS: EN 55024, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC-61000-4-6, IEC 61000-4-8, IEC-61000-4-11
Green Product: RoHS, CRoHS, WEEE

Power Requirements
Power Consumption: 260 mA @ 5 VDC

MTBF (mean time between failures)
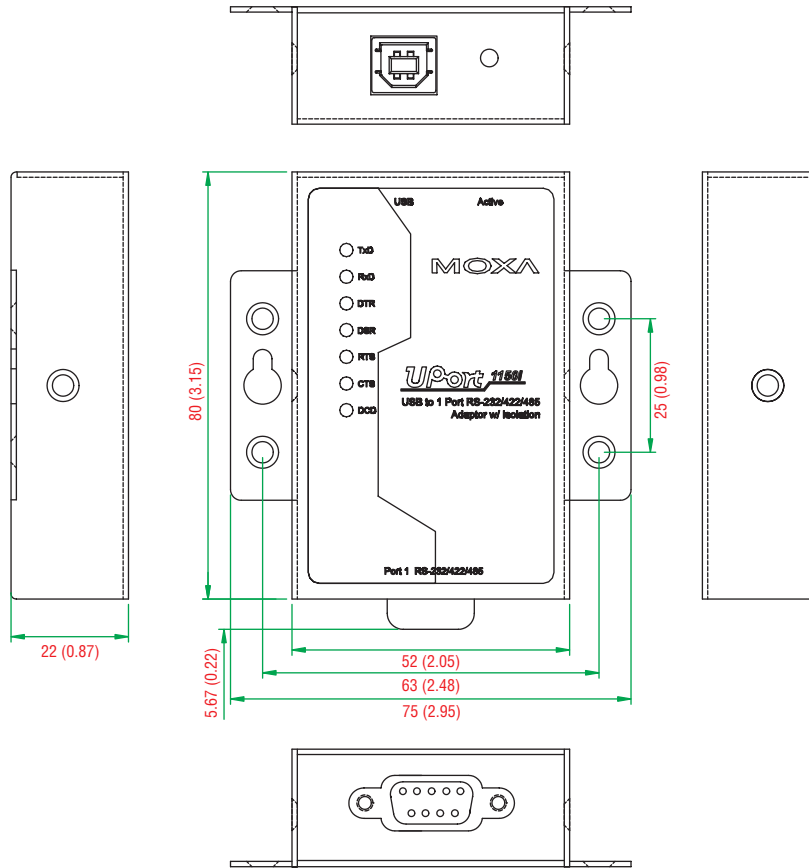**Time:** 1,949,025 hrs
Database: Telcordia (Bellcore), GB

Warranty
Warranty Period: 5 years
Details: See www.moxa.com/warranty

Dimensions

Unit: mm (inch)

Ordering Information

Available Models
UPort 1150I: 1-port RS-232/422/485 USB-to-serial converter with 2 KV optical isolation

Optional Accessories (can be purchased separately)
DK35A: Mounting kit for 35-mm DIN-Rail
Mini DB9F-to-TB Adaptor: DB9 female to terminal block adaptor for RS-422/485 applications

Package Checklist
- 1 UPort 1150I USB-to-serial converter
- USB-IF certified cable
- 1 mini DB9 female to terminal block adaptor
- Velcro lock-down strap for the USB cable
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card