

UPort™ 1600-8 Series

8-port RS-232 and RS-232/422/485 USB-to-serial converters



- > Hi-Speed USB 2.0 for up to 480 Mbps USB transmission
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Built-in 15 KV ESD protection for all serial ports
- > IP30-rated, rugged metal housing
- > COM port assignments maintained across different PCs
- > Mini DB9 female to terminal block adaptor for easy wiring
- > Certified drivers provided for Windows (including Vista), WinCE 5.0, and Linux
- > Locking power cord

The certification logos shown here apply to some or all of the products in this section. Please see the **Specifications** section or Moxa's website for details.



Instant Plug & Play

The UPort™ 1600-8 USB-to-serial converters allow you to connect 8 RS-232/422/485 devices to your laptop or workstation through the USB (Universal Serial Bus) port. The UPort™ 1600-8 converters are

compatible with new and legacy serial devices, and are perfect for mobile, instrumentation, and point-of-sale applications.

Simplified, Hassle-free Serial Port Expansion

USB plug & play makes serial port expansion easy, and does not require IRQ, DMA, or I/O address resources. Users no longer need

to open the chassis or power down the system to add COM ports, saving on setup time and cost.

Top Serial Performance

Moxa's 20-plus years of experience in serial board design is now built into a new top performance CPU called MOXA ART. This chip equips the UPort™ 1600-8 converters with USB 2.0 (Hi-Speed 480 Mbps), a

128-byte FIFO, on-chip hardware and software flow control, and burst data mode, making Moxa's UPort™ converters perform far better than the competition.

Specifications

USB

Compliance: USB 1.0/1.1/2.0 compliant
Connector: USB type B
Speed: 480 Mbps (Hi-Speed USB) and 12 Mbps (Full-Speed USB)

Serial Interface

Number of Ports: 8
Serial Standards:
 UPort™ 1610-8: RS-232
 UPort™ 1650-8: RS-232/422/485

Connectors: DB9 male

Serial Line Protection

ESD Protection: 15 KV embedded

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
I/O Address: Assigned by BIOS
IRQ: Assigned by BIOS
FIFO: 128 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 (2000, XP x86/x64, 2003 x86/x64, Vista x86/x64), Win CE 5.0, and Linux 2.6 x86/x64

Physical Characteristics

Housing: SECC sheet metal (1 mm), IP30 protection

Weight:

Product only: 835 g (1.84 lb)

Packaged: 1435 g (3.16 lb)

Dimensions: 204 x 44 x 125 mm (8.03 x 1.73 x 4.92 in)

Environmental Limits

Operating Temperature: 0 to 55°C (32 to 131°F)

Operating Humidity: 5 to 95% RH

Storage Temperature: -20 to 75°C (-4 to 167°F)

Regulatory Approvals: EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, FCC Part 15 Class A, UL, CUL, TÜV

Power Requirements

Power Consumption:

UPort™ 1610-8 (12 to 48 VDC external power): 230 mA @ 12 VDC

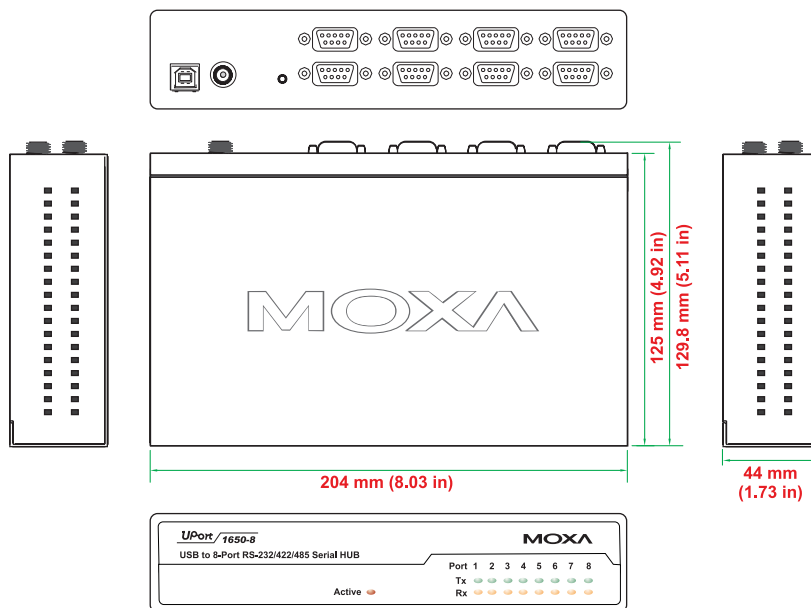
UPort™ 1650-8 (12 to 48 VDC external power): 340 mA @ 12 VDC

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions



Ordering Information

Available Models

UPort™ 1610-8: 8-port RS-232 USB-to-serial converter

UPort™ 1650-8: 8-port RS-232/422/485 USB-to-serial converter

Optional Accessories (can be purchased separately)

Mini DB9F-to-TB Adaptor: DB9 female to terminal block adaptor for RS-422/485 applications

Magnet Accessory: Magnets for attaching the UPort™ 1600-8 to the PC's housing

Mounting Options: DIN-Rail or Wall Mount Kit

Package Checklist

- UPort™ 1600-8 USB-to-serial converter
- USB cable
- Power adaptor
- 1 mini DB9 female to terminal block adaptor (UPort™ 1650-8 only)
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card