

UPort™ 1600-16 Series

16-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
- > 15N high retention USB type B connector
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Standard 19-inch rack-mountable
- > Built-in 15 KV ESD protection on 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
- > Drivers provided for Windows, WinCE, and Linux



Instant Plug & Play

The UPort™ 1600-16 USB-to-serial converters allow you to connect 16 RS-232 or RS-232/422/485 devices to your laptop or workstation through the USB (Universal Serial Bus) port. The UPort™ 1600-16

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™ 1600-16 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 Interface

Compliance: USB 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: 16

Serial Standards:

UPort™ 1610-16: RS-232

UPort™ 1650-16: RS-232/422/485

Connector: 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/2003/Vista x86/x64), Win CE 5.0/6.0, Linux 2.4, Linux 2.6 x86/x64

Physical Characteristics

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

Weight:

Product only: 2475 g (5.45 lb)

Packaged: 3440 g (7.58 lb)

Dimensions: 440 x 45.5 x 198.1 mm (17.32 x 1.79 x 7.80 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, EN61000-4-8, EN61000-4-11, FCC Part 15 Class A, UL, CUL, TÜV

Power Requirements

Input Voltage: 100 to 240 VAC external power

Power Consumption:

UPort™ 1610-16: 130 mA @ 100 VAC

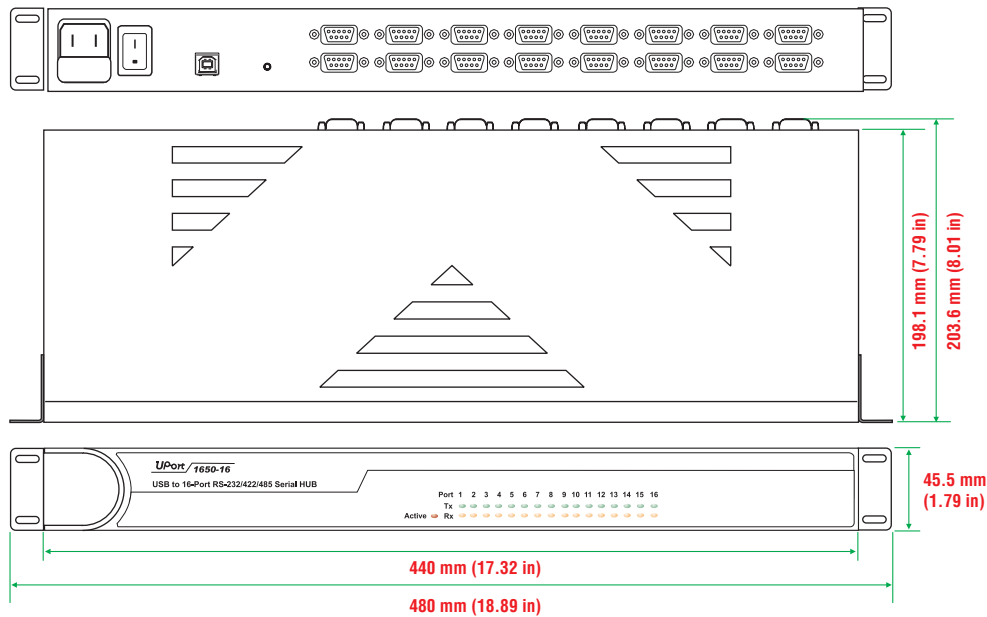
UPort™ 1650-16: 150 mA @ 100 VAC

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions



Ordering Information

Available Models

UPort™ 1610-16: 16-port RS-232 USB-to-serial converter

UPort™ 1650-16: 16-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

Rackmount Kit: Metal plates and screws

Package Checklist

- UPort™ 1600-16 USB-to-serial converter
- USB-IF certified cable
- Power cord
- 1 mini DB9 female to terminal block adaptor (UPort™ 1650-16 only)
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card