



USB Connectivity

Product Selection Guides

USB-to-Serial Server Selection Guide	11-2
USB Hub Selection Guide	11-4

USB-to-Serial Converters

Introduction to USB-to-Serial Converters	11-5
UPort™ 1110/1130 1-port RS-232 and RS-422/485 converters.....	11-7
UPort™ 1150/1150I 1-port RS-232/422/485 converters with 2 KV isolation	11-8
UPort™ 1250/1250I 2-port RS-232/422/485 converters with 2 KV isolation	11-10
UPort™ 1400 Series 4-port RS-232/422/485 converters with 2 KV isolation.....	11-12
UPort™ 1610-8/1650-8 8-port RS-232 and RS-232/422/485 converters.....	11-14
UPort™ 1610-16/1650-16 16-port RS-232 and RS-232/422/485 converters	11-16
UPort™ 2210 2-port RS-232 converter.....	11-18
UPort™ 2410 4-port RS-232 converter.....	11-20


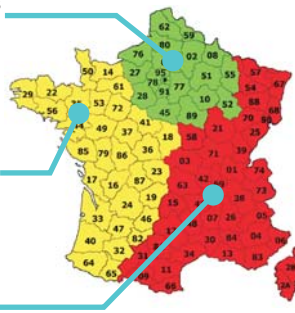



Industrial USB Hubs

UPort™ 404 4-port industrial USB hub.....	11-22
UPort™ 407 7-port industrial USB hub	11-23

11

USB Connectivity



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		<p> Groupe </p>

USB-to-Serial Server Selection Guide



	UPort™ 1110	UPort™ 1130	UPort™ 1150	UPort™ 1150I	UPort™ 1250	UPort™ 1250I	UPort™ 1410	
USB								
Compliance	USB 1.0/1.1 compliant, USB 2.0 compatible				USB 1.1/2.0 compliant		USB 1.1/2.0 compliant	
Connector	USB type A			USB type B		USB type B		
Speed	12 Mbps (Full-Speed USB)				480 Mbps (Hi-Speed USB) and 12 Mbps (Full-Speed USB)		480 Mbps (Hi-Speed USB) and 12 Mbps (Full-Speed USB)	
Serial Interface								
Number of Ports	1				2		4	
Serial Standards	RS-232	RS-422/485	RS-232/422/485				RS-232	
Connectors	DB9 male							
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							
IRQ Assigned by BIOS	√	√	√	√	√	√	√	
FIFO	64 bytes				128 bytes			
Baudrate	50 bps to 921.6 Kbps							
15 KV ESD Protection	√	√	√	√	√	√	√	
2 KV Optical Isolation Protection	---	---	---	√	---	√	---	
Physical Characteristics								
Housing	ABS + PC			SECC sheet metal (1 mm)				
Weight	Product only: 85 g (0.19 lb) Packaged: 170 g (0.37 lb)	Product only: 85 g (0.19 lb) Packaged: 190 g (0.42 lb)	Product only: 85 g (0.19 lb) Packaged: 195 g (0.43 lb)	Product only: 71 g (0.16 lb) Packaged: 181 g (0.40 lb)	Product only: 180 g (0.40 lb) Packaged: 660 g (1.45 lb)		Product only: 720 g (1.59 lb) Packaged: 1345 g (2.96 lb)	
Dimensions	37.5 x 60 x 20.5 mm (1.48 x 2.36 x 0.81 in)		37.5 x 60 x 20.5 mm (1.48 x 2.36 x 0.81 in)	52 x 80 x 22 mm (2.05 x 3.15 x 0.87 in)	77 x 26 x 111 mm (3.03 x 1.02 x 4.37 in)		204 x 30 x 125 mm (8.03 x 1.18 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 70°C (-4 to 158°F)				-20 to 75°C (-4 to 167°F)			
Regulatory Approvals	EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-8, FCC Part 15 Class B		EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, 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, FCC Part 15 Class B		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		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	30 mA @ 5 VDC	90 mA @ 5 VDC	77 mA @ 5 VDC	260 mA @ 5 VDC	360 mA @ 5 VDC (bus power)	200 mA @ 12 VDC (external power)	180 mA @ 5 VDC (bus power)	
Reliability								
Warranty	5 years (see www.moxa.com/warranty)							



USB-to-Serial Server Selection Guide (continued)



	UPort™ 1450	UPort™ 1450I	UPort™ 1610-8	UPort™ 1610-16	UPort™ 1650-8	UPort™ 1650-16	UPort™ 2210	UPort™ 2410	
USB									
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	4		8	16	8	16	2	4	
Serial Standards	RS-232/422/485		RS-232		RS-232/422/485		RS-232		
Connectors	DB9 male								
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								
IRQ Assigned by BIOS	√	√	√	√	√	√	√	√	
FIFO	128 bytes								
Baudrate	50 bps to 921.6 Kbps								
15 KV ESD Protection	√	√	√	√	√	√	√	√	
2 KV Optical Isolation Protection	---	√	---	---	---	---	---	---	
Physical Characteristics									
Housing	SECC sheet metal (1 mm)						Plastic		
Weight	Product only: 720 g (1.59 lb) Packaged: 1345 g (2.96 lb)		Product only: 835 g (1.84 lb) Packaged: 1435 g (3.16 lb)	Product only: 2475 g (5.45 lb) Packaged: 3485 g (7.68 lb)	Product only: 835 g (1.84 lb) Packaged: 1435 g (3.16 lb)	Product only: 2475 g (5.45 lb) Packaged: 3485 g (7.68 lb)	---	---	
Dimensions	204 x 30 x 125 mm (8.03 x 1.18 x 4.92 in)		204 x 44 x 125 mm (8.03 x 1.73 x 4.92 in)				70 x 35 x 120 mm (2.76 x 1.38 x 4.72 in)	80 x 35 x 185 mm (3.15 x 1.38 x 7.28 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, TUV						EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, 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, FCC Part 15 Class B		
Power Requirements									
Power Consumption	260 mA @ 12 VDC	360 mA @ 12 VDC	230 mA @ 12 VDC (external power)	130 mA @ 100 VAC	340 mA @ 12 VDC (external power)	150 mA @ 100 VAC	---	---	
Reliability									
Warranty	5 years (see www.moxa.com/warranty)								

USB Hub Selection Guide



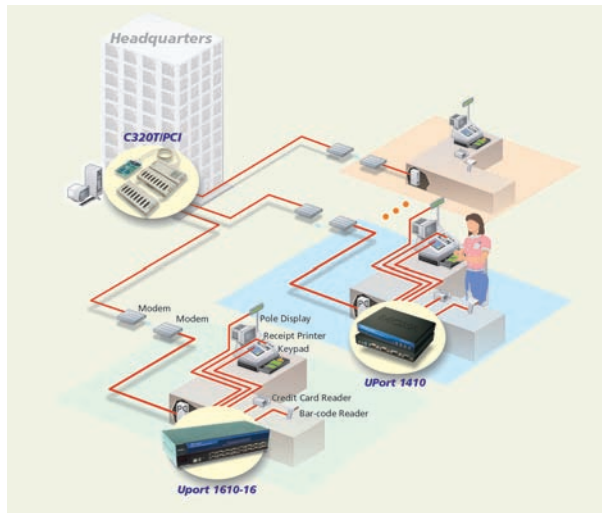
	UPort™ 404	UPort™ 407
USB		
Compliance	USB 1.1/2.0 compliant	
Upstream	1 USB port, Type B connector	
Downstream	4 USB ports, Type A connectors	7 USB ports, Type A connectors
Speed	480 Mbps (Hi-Speed USB) and 12 Mbps (Full-Speed USB)	
Supply Current	500 mA max. per channel	
Physical Characteristics		
Housing	Aluminum	
Dimensions	80 x 35 x 130 mm (3.15 x 1.38 x 5.12 in)	100 x 35 x 195 mm (3.94 x 1.38 x 7.68 in)
Environmental Limits		
Operating Temperature	0 to 70°C (32 to 158°F)	
Operating Humidity	5 to 95% RH	
Storage Temperature	-20 to 75°C (-4 to 167°F)	
15 KV ESD Protection	√	√
Regulatory Approvals	EN61000-6-4, EN61000-6-2, FCC Part 15 Class A, UL508, LVD	
Warranty		
Warranty	5 years (see www.moxa.com/warranty)	

11

USB Connectivity > USB Hub Selection Guide

Introduction to USB-to-Serial Converters

The USB-to-serial servers in Moxa's UPort™ line provide several options for connecting data acquisition equipment and many other types of serial devices to notebooks, desktop PCs, and servers. Important features of the UPort™ include support for high speed (480 Mbps) USB 2.0, the MOXA UART high power processor, the ability to assign COM port numbers, and a data logger. In addition, magnet accessories for attaching the UPort™ to desktop PC housings, a mini DB9 female to terminal block adaptor, and the COM Preserver™ tool are provided to make the UPort™ easy to use and maintain. Choose from models with 1, 2, 4, 8, or 16 independent RS-232/422/485 serial ports.



The Convenience of Plug & Play

Moxa's UPort™ 1000/2000 series of USB-to-serial products allow your laptop or workstation to communicate with up to 16 serial devices through the computer's USB (Universal Serial Bus) port. USB is truly

plug & play, and eliminates the need to set IRQs and DIP switches. Most UPort™ 1000/2000 products are compliant with USB 2.0 and USB 1.1 specifications, and meet the 480 Mbps Hi-Speed requirement.

Reduce Short and Long Term Costs

For many applications, system integrators are moving towards using either serial-to-Ethernet or USB-to-serial products to connect serial devices to a PC. The overall costs of setting up an application is reduced, not only from a short term hardware investment perspective, but also by reducing costs associated with long term management and

integration. Another big plus to using Moxa's USB-to-serial solutions is that each product supports a broad range of operating systems. Drivers are available for Windows 98/ME/2000, Windows XP/2003/Vista (x86 and x64), WinCE 5.0, and Linux 2.6 (x86 and x64).

RS-232/422/485 Support

Moxa's UPort™ 1000/2000 series of USB-to-serial products include models that support some or all of the RS-232/422/485 serial interfaces. The full slate of RS-232 signals (TxD, RxD, DTR, DSR, RTS, CTS, DCD) are supported, and both 2-wire and 4-wire RS-485

can be used. Many of Moxa's USB-to-serial products use DB9 male connectors for the serial ports, and for industrial applications, the DB9 female to terminal block accessory can be used. In addition, users can select baudrates up to 921.6 Kbps, and make use of the 128-byte FIFO.

USB Bus Power Supported

Some UPort™ models support both bus power and external power through the power adaptor. Bus power can be used with laptop and workstation connections that support a 500 mA output for USB

devices. An external power adaptor can be used if your computer's USB port does not provide enough amperage to run the UPort™.

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™ 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.

: COM Preserver™ *

Serial transmission applications use names such as COM3 and COM4 to identify COM ports. Unfortunately, most USB-to-serial products are unable to use fixed COM names on the host PC. This means that the names of the COM ports change when the USB-to-serial device is plugged into a different USB port, either on the same or a different PC, forcing the user to reconfigure the COM names manually from within the application.

Moxa's UPort™ 1200/1400/1600 USB-to-serial hubs have an advanced feature that allows them to use fixed COM names. When the user enables the "COM Preserver™" function, the COM names "go with" the UPort™ device. In fact, Moxa's drivers can even create the same COM port names on a different host PC. With this feature, you do not need

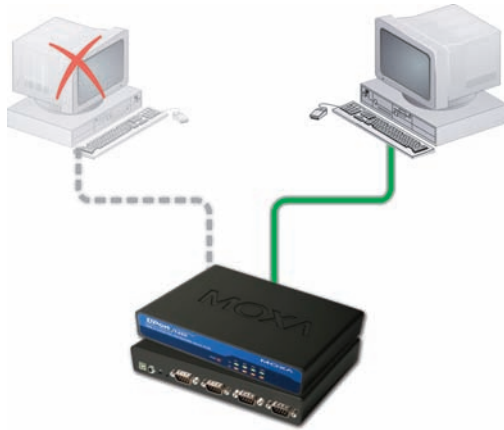
to modify application programs, or rebuild the entire project every time you install a new operating system or upgrade the computer. Don't worry about moving the UPort™ from one USB hub to another, or even from one computer to another. Once the COM Preserver™ function is enabled, the names of the USB-to-serial COM ports will go with the UPort™ wherever it is used.

Note that the COM Preserver™ function is disabled by default. Users can use the traditional method of enumerating COM ports, or enable the COM Preserver™ function to make use of this great new feature.

* Patent Pending

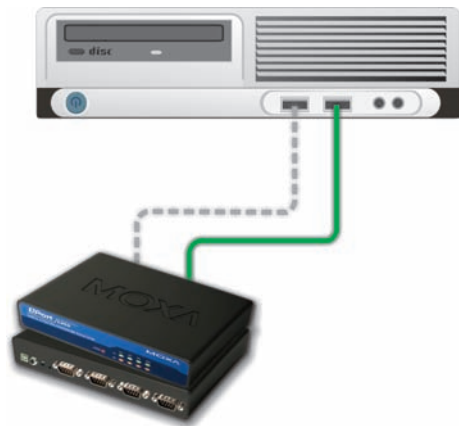
Scenario 1

COM port assignment is maintained across different PCs



Scenario 2

COM port assignment is maintained across different USB ports



: Models available with 1, 4, 8, or 16 ports

Interface	No. of Ports	Model Name
RS-232	1	UPort™ 1110
	2	UPort™ 2210
	4	UPort™ 1410 UPort™ 2410
	8	UPort™ 1610-8
	16	UPort™ 1610-16
RS-422/485	1	UPort™ 1130
RS-232/422/485	1	UPort™ 1150/1150I
	2	UPort™ 1250/1250I
	4	UPort™ 1450/1450I
	8	UPort™ 1650-8
	16	UPort™ 1650-16

: Magnet accessory for attaching to PC housing

The typical way to use a device such as the UPort™ 1400/1610-8/1650-8 is to place the UPort™ on the desk near the laptop or desktop PC. However, placing the UPort™ in this way wastes space, and due to the nature of USB, makes it more likely that the connection between the PC and UPort™ will get disconnected. The

"magnet" solution introduced by Moxa is simple, but innovative. The solution uses magnet accessories that come with the product to attach the UPort™ to the host PC's housing. Not only do you save space, but you can also fix the position of the USB cable that attaches the UPort™ to the PC.



UPort™ 1110/1130

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



Terminal Block Adaptor for UPort™ 1130

- > Compatible with USB 2.0
- > 12 Mbps USB data rate
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > Drivers provided for Windows (including Vista), WinCE 5.0, and Linux
- > DB9 male connector for RS-232, terminal block adaptor for RS-422/485
- > LEDs for indicating USB and TxD/RxD activity
- > 15 KV ESD protection for all serial ports

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™ 1110/1130 USB-to-serial converters are the perfect accessory for laptop computers that don't have a serial port. The UPort™ 1110 converts from USB to RS-232, and the UPort™ 1130

converts from USB to RS-422/485. Both products are compatible with new and legacy RS-232 devices, and can be used with mobile, instrumentation, and point-of-sale applications.

Specifications

USB

Compliance: USB 1.0/1.1 compliant, USB 2.0 compatible

Connector: USB type A

Speed: 12 Mbps (Full-Speed USB)

Serial Interface

Number of Ports: 1

Serial Standards:

UPort™ 1110: RS-232

UPort™ 1130: RS-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: 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

Driver Support

Operating Systems: Windows (2000, XP x86/x64, 2003 x86/x64, Vista x86/x64), WinCE 5.0, Linux 2.6 x86/x64

Physical Characteristics

Housing: ABS + PC

Weight:

Product only: 85 g (0.19 lb)

Packaged:

UPort™ 1110: 170 g (0.37lb)

UPort™ 1130: 190 g (0.42lb)

Dimensions: 37.5 x 60 x 20.5 mm (1.48 x 2.36 x 0.81 in)

Environmental Limits

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

Operating Humidity: 5 to 95% RH

Storage Temperature: -20 to 70°C (-4 to 158°F)

Regulatory Approvals: EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-8, FCC Part 15 Class B

Power Requirements

Power Consumption:

UPort™ 1110: 30 mA @ 5 VDC

UPort™ 1130: 90 mA @ 5 VDC

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Ordering Information

Available Models

UPort™ 1110: 1-port RS-232 USB-to-serial converter

UPort™ 1130: 1-port RS-422/485 USB-to-serial converter

Package Checklist

- UPort™ 1110 or UPort™ 1130 USB-to-serial converter
- 1 mini DB9 female to terminal block adaptor (UPort™ 1130)
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card



UPort™ 1150/1150I

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



UPort™ 1150

UPort™ 1150I

- > Compatible with USB 2.0
- > 12 Mbps USB data rate
- > Software selectable RS-232, RS-422, 4-wire RS-485, and 2-wire RS-485
- > Certified drivers provided for Windows (including Vista), WinCE 5.0, and Linux
- > 15 KV ESD protection for all serial ports
- > 2 KV optical isolation protection (UPort™ 1150I)
- > Full modem status LEDs for UPort™ 1150I

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™ 1150/1150I USB-to-serial converters allow you to connect 1 RS-232/422/485 device to your laptop or workstation through the USB (Universal Serial Bus) port. These plug & play USB solutions are

compatible with both new and legacy RS-232/422/485 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.

COM Port Numbers Displayed in Windows System Tray

When using a UPort™ 1150 or UPort™ 1150I to connect a serial device to your PC, it may be necessary to determine the COM port number assigned to the serial device. A new tool provided by Moxa gives engineers a handy means of determining the COM port number of the device. When the UPort™ is plugged into your computer's USB port, a UPort™ icon will be placed in the Windows System Tray located in

the lower right corner of the desktop. Simply position the cursor over the UPort™ icon, and an information window showing the COM port number will pop up. When two or more UPort™ converters are connected to the same computer, the pop-up window will show the COM numbers for all of the converters.

Specifications

USB Interface

Compliance: USB 1.0/1.1 compliant, USB 2.0 compatible

Connector:

UPort™ 1150: USB type A

UPort™ 1150I: 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 Protection: 2 KV (UPort™ 1150I only)

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: 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

Driver Support

Operating Systems: Windows (2000, XP x86/x64, 2003 x86/x64, Vista x86/x64), WinCE 5.0, Linux 2.6 x86/x64

Physical Characteristics

Housing:

UPort™ 1150: ABS + PC

UPort™ 1150I: SECC sheet metal (1 mm), IP30 protection

Weight:

Product only:

UPort™ 1150: 85 g (0.19 lb)

UPort™ 1150I: 71 g (0.16 lb)

Packaged:

UPort™ 1150: 195 g (0.43 lb)

UPort™ 1150I: 181 g (0.40 lb)

Dimensions:

UPort™ 1150: 37.5 x 60 x 20.5 mm (1.48 x 2.36 x 0.81 in)

UPort™ 1150I: 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)

Operating Humidity: 5 to 95% RH

Storage Temperature: -20 to 70°C (-4 to 158°F)

Regulatory Approvals: EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, 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, FCC Part 15 Class B

Power Requirements

Power Consumption:

UPort™ 1150: 77 mA @ 5 VDC

UPort™ 1150I: 260 mA @ 5 VDC

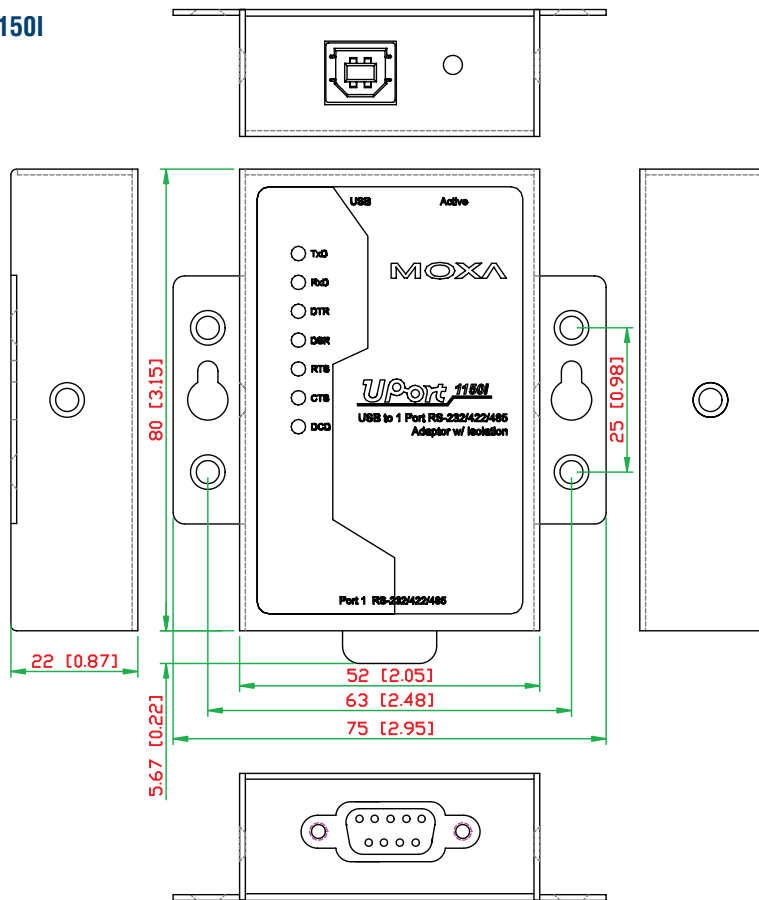
Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions

UPort™ 1150I



unit: mm (in)

Ordering Information

Available Models

UPort™ 1150: 1-port RS-232/422/485 USB-to-serial converter

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

Package Checklist

- UPort™ 1150 or 1150I USB-to-serial converter
- 1 mini DB9 female to terminal block adaptor
- Velcro lock-down strap for the USB cable
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card

UPort™ 1250/1250I

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



UPort™ 1250

UPort™ 1250I

- > 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
- > Additional I/O and IRQ not needed
- > Certified drivers provided for Windows (including Vista), and WinCE 5.0
- > Easy monitoring with LEDs and management software
- > 15 KV ESD protection for all serial ports
- > Choose bus power (UPort™ 1250) or external power (UPort™ 1250I)

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™ 1250/1250I USB-to-serial converters allow you to connect 2 RS-232/422/485 devices to your laptop or workstation through the

USB (Universal Serial Bus) port. This plug & play USB solution is 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™ 1250/1250I 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 the top performing USB-to-serial converters in the world.

Specifications

USB

- 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:** 2
- Serial Standards:** RS-232/422/485
- Connectors:** DB9 male

Serial Line Protection

- ESD Protection:** 15 KV embedded
- Optical Isolation Protection:** 2 KV (UPort™ 1250I only)

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



Driver Support

Operating Systems: Windows (2000, XP x86/x64, 2003 x86/x64, Vista x86/x64) and WinCE 5.0

Physical Characteristics

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

Weight:

Product only: 180 g (0.40 lb)

Packaged: 660 g (1.45 lb)

Dimensions: 77 x 26 x 111 mm (3.03 x 1.02 x 4.37 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™ 1250 (bus power): 360 mA @ 5 VDC

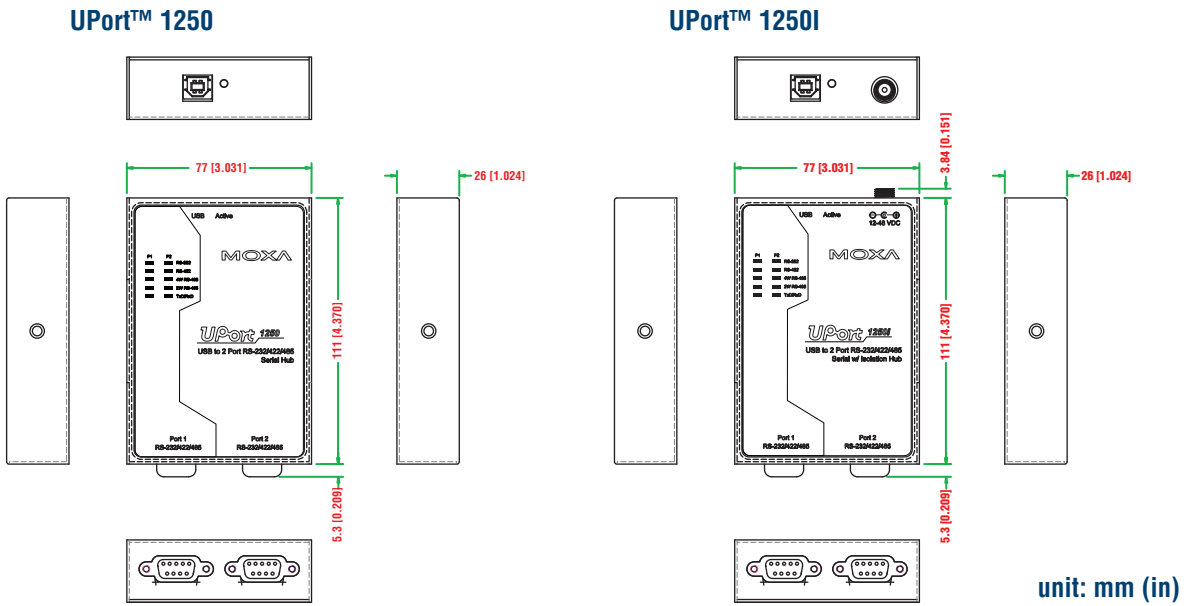
UPort™ 1250I (12 to 48 VDC external power): 200 mA @ 12 VDC

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions



Ordering Information

Available Models

UPort™ 1250: 2-port RS-232/422/485 USB-to-serial converter

UPort™ 1250I: 2-port RS-232/422/485 USB-to-serial converter with 2 KV isolation protection

Optional Accessories (can be purchased separately)

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

Package Checklist

- UPort™ 1250 or 1250I USB-to-serial converter
- 1 mini DB9 female to terminal block adaptor
- Power adaptor (UPort™ 1250I)
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card



UPort™ 1400 Series

4-port RS-232 and RS-232/422/485 USB-to-serial converters with 2 KV isolation protection



- > 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
- > 2 KV optical isolation protection (UPort™ 1450I only)
- > IP30-rated, rugged metal housing
- > COM port assignments maintained across different PCs
- > Certified drivers provided for Windows (including Vista) and WinCE 5.0
- > Choose bus power or external power

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™ 1400 USB-to-serial converters allow you to connect 4 RS-232/422/485 devices to your laptop or workstation through the USB (Universal Serial Bus) port. The UPort™ 1400 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™ 1400 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 1.1/2.0 compliant
Connector: USB type B
Speed: 480 Mbps (Hi-Speed USB) and 12 Mbps (Full-Speed USB)

Serial Interface

Number of Ports: 4
Serial Standards:
 UPort™ 1410: RS-232
 UPort™ 1450/1450I: RS-232/422/485

Connectors: DB9 male

Serial Line Protection

ESD Protection: 15 KV embedded
Optical Isolation Protection: 2 KV (UPort™ 1450I only)

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

Driver Support

Operating Systems: Windows (2000, XP x86/x64, 2003 x86/x64, Vista x86/x64) and WinCE 5.0

Physical Characteristics

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

Weight:

Product only: 720 g (1.59 lb)

Packaged: 1345 g (2.96 lb)

Dimensions: 204 x 30 x 125 mm (8.03 x 1.18 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™ 1410 (bus power): 180 mA @ 5 VDC

UPort™ 1450 (12 to 48 VDC external power): 260 mA @ 12 VDC

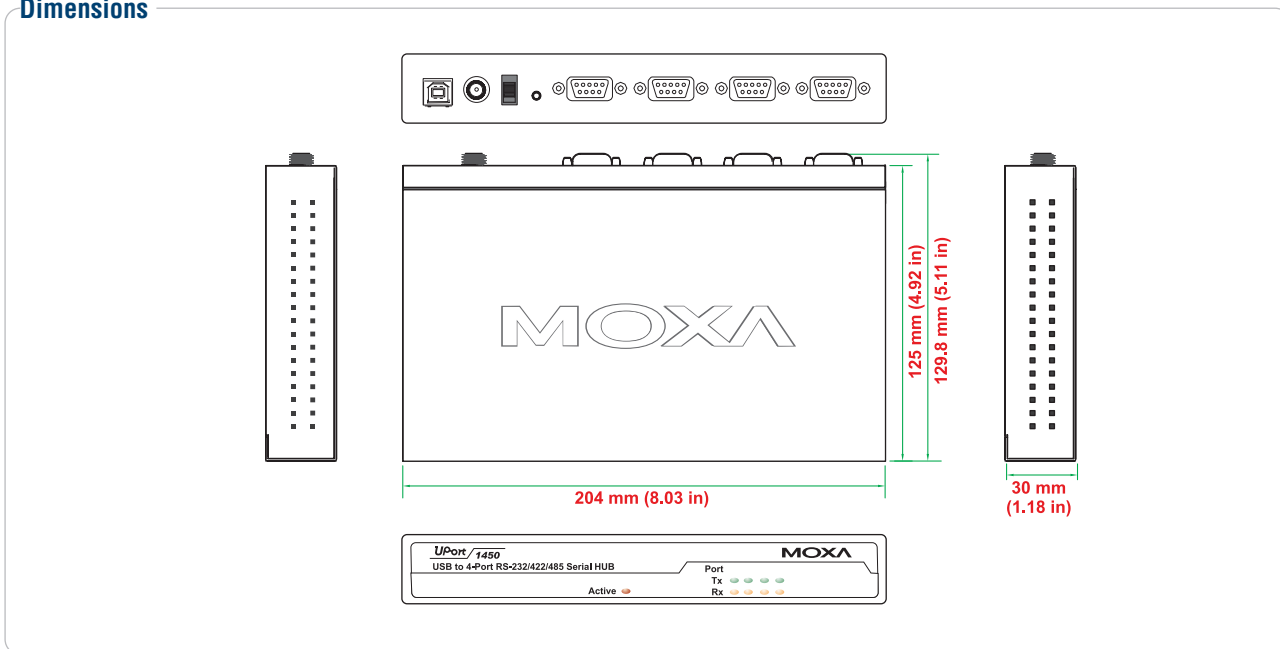
UPort™ 1450I (12 to 48 VDC external power): 360 mA @ 12 VDC

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions



Ordering Information

Available Models

UPort™ 1410: 4-port RS-232 USB-to-serial converter

UPort™ 1450: 4-port RS-232/422/485 USB-to-serial converter

UPort™ 1450I: 4-port RS-232/422/485 USB-to-serial converter with 2 KV isolation protection

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™ 1400 to the PC's housing

Power Adaptor: Available for the UPort 1410 (if the USB port does not provide enough power)

Package Checklist

- UPort™ 1400 USB-to-serial converter
- 1 mini DB9 female to terminal block adaptor (UPort™ 1450 and 1450I only)
- Power adaptor (UPort™ 1450 and 1450I only)
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card

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) and WinCE 5.0
- > 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

Driver Support

Operating Systems: Windows (2000, XP x86/x64, 2003 x86/x64, Vista x86/x64) and WinCE 5.0

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

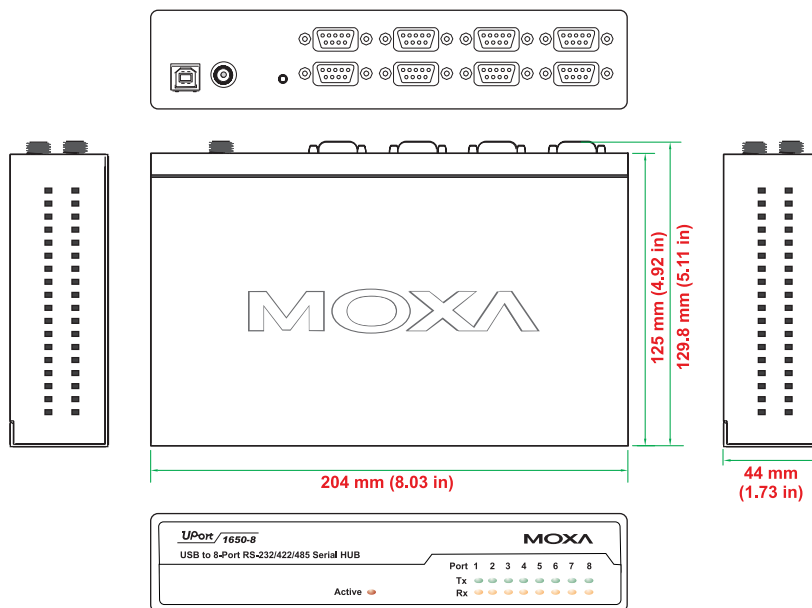
UPort™ 1650-8 (12 to 48 VDC external power): 340 mA @ 12 VDC

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

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

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
- > 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 (including Vista) and WinCE 5.0
- > 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™ 1600-16 USB-to-serial converters allow you to connect 16 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

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: 16
Serial Standards:
 UPort™ 1610-16: RS-232
 UPort™ 1650-16: 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

Driver Support

Operating Systems: Windows (2000, XP x86/x64, 2003 x86/x64, Vista x86/x64) and WinCE 5.0

Physical Characteristics

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

Weight:

Product only: 2475 g (5.45 lb)

Packaged: 3485 g (7.68 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, FCC Part 15 Class A, UL, CUL, TÜV

Power Requirements

Power Consumption:

UPort™ 1610-16: 130 mA @ 100 VAC

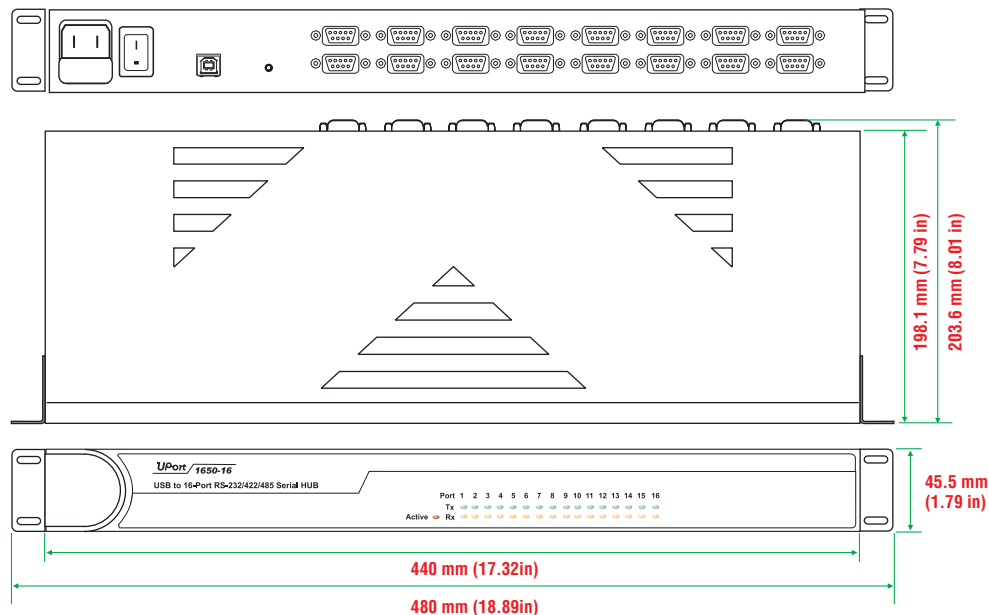
UPort™ 1650-16: 150 mA @ 100 VAC

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

Magnet Accessory: Magnets for attaching the UPort™ 1600-16 to the PC's housing

Package Checklist

- UPort™ 1600-16 USB-to-serial converter
- USB 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

AVAILABLE IN Q2

UPort™ 2210

2-port RS-232 USB-to-serial converter



- > Hi-Speed USB 2.0 for up to 480 Mbps USB transmission
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > Additional I/O and IRQ not needed
- > Built-in 15 KV ESD protection for all serial ports
- > Certified drivers provided for Windows (including Vista) and Linux
- > Easy monitoring with LEDs and management software



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™ 2210 USB-to-serial converter allows you to connect 2 RS-232 devices to your laptop or workstation through the USB (Universal Serial Bus) port. The UPort™ 2210 is a cost-effective

solution for both new and legacy RS-232 devices, and is 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.

Specifications

USB

- 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:** 2
- Serial Standards:** RS-232
- 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:** 16 bytes

Serial Signals

RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

Driver Support

Operating Systems: Windows (2000, XP x86/x64, 2003 x86/x64, Vista x86/x64), Linux 2.6 x86/x64

Physical Characteristics

- Housing:** Plastic
- Dimensions:** 70 x 35 x 120 mm (2.76 x 1.38 x 4.72 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 B, EN55024, EN61000-3-2, EN61000-3-3, 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, FCC Part 15 Class B

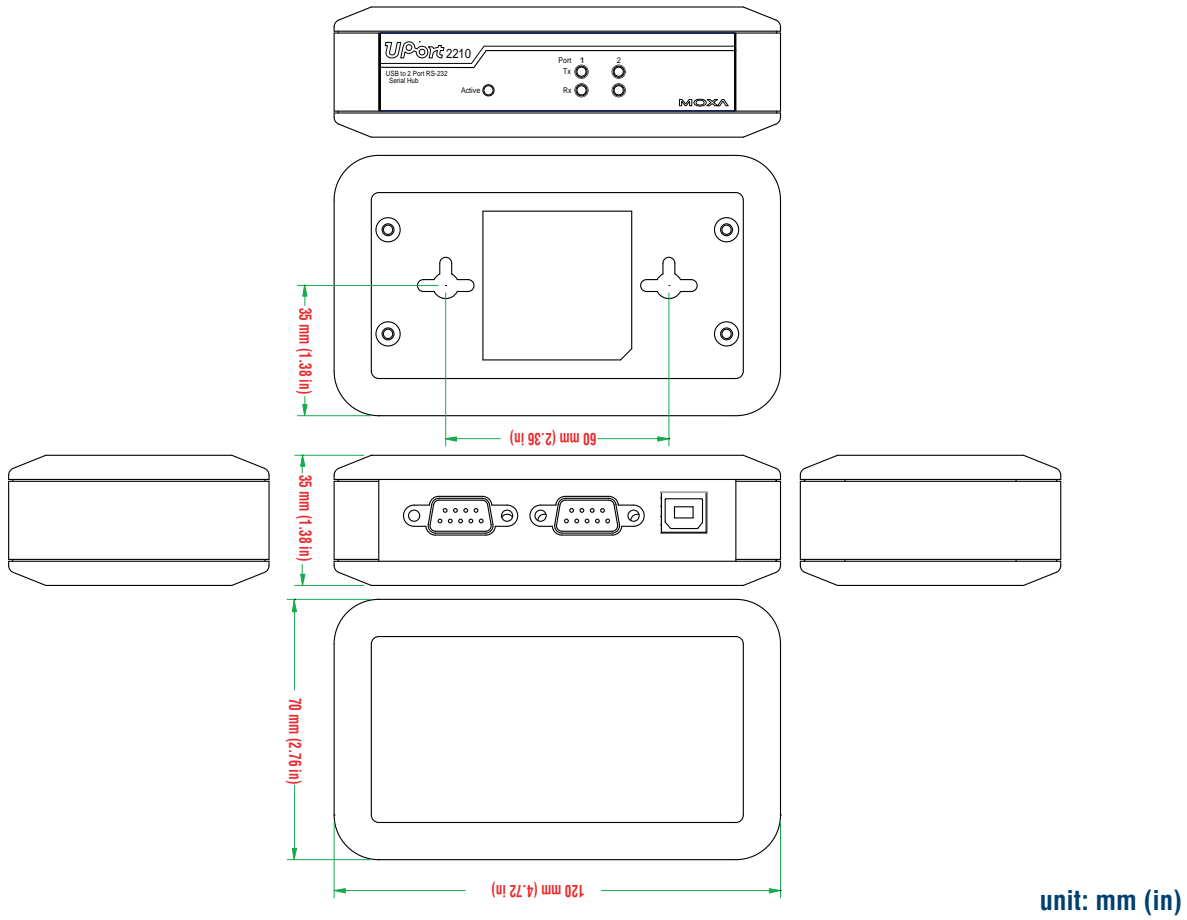
Warranty

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

11

USB Connectivity > UPort™ 2210

Dimensions



Ordering Information

Available Models

UPort™ 2210: 2-port RS-232 USB-to-serial converter

Package Checklist

- UPort™ 2210
- USB cable
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card

UPort™ 2410

4-port RS-232 USB-to-serial converter



- > Hi-Speed USB 2.0 for up to 480 Mbps USB transmission
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > Additional I/O and IRQ not needed
- > Built-in 15 KV ESD protection for all serial ports
- > Certified drivers provided for Windows (including Vista), and Linux
- > Easy monitoring with LEDs and management software

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™ 2410 USB-to-serial converter allows you to connect 4 RS-232 devices to your laptop or workstation through the USB (Universal Serial Bus) port. The UPort™ 2410 is a cost-effective

solution for both new and legacy RS-232 devices, and is 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.

Specifications

USB

- 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:** 4
- Serial Standards:** RS-232
- 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:** 16 bytes

Serial Signals

RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

Driver Support

Operating Systems: Windows (2000, XP x86/x64, 2003 x86/x64, Vista x86/x64), Linux 2.6 x86/x64

Physical Characteristics

- Housing:** Plastic
- Dimensions:** 80 x 35 x 185 mm (3.15 x 1.38 x 7.28 in)

Environmental Limits

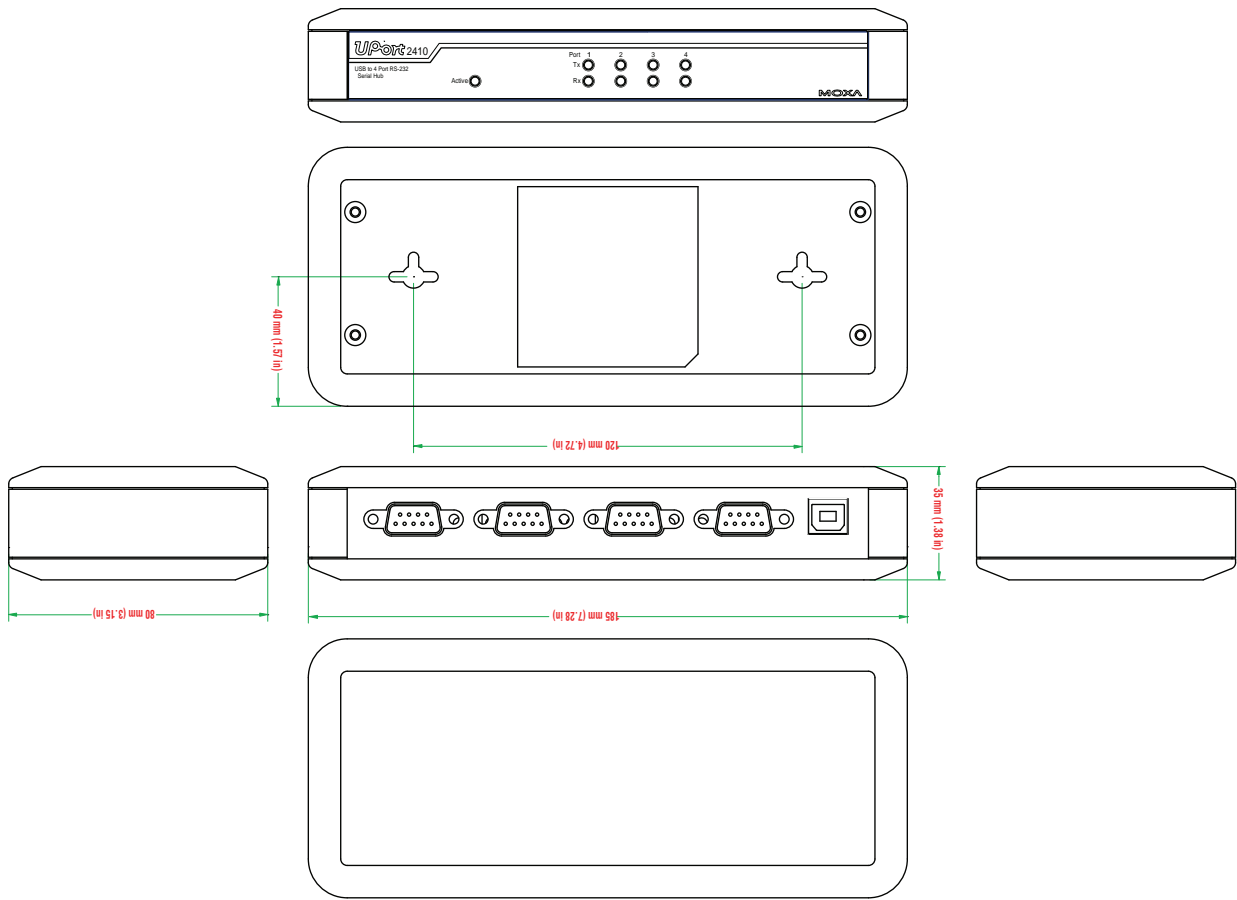
- Operating Temperature:** 0 to 55°C (32 to 131°F)
- Operating Humidity:** 5 to 95% RH
- Storage Temperature:** -20 to 75°C (-4 to 167°F)

Regulatory Approvals: EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, 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, FCC Part 15 Class B

Warranty

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

Dimensions



unit: mm (in)

Ordering Information

Available Models

UPort™ 2410: 4-port RS-232 USB-to-serial converter

Package Checklist

- UPort™ 2410
- USB cable
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card

AVAILABLE IN Q2

UPort™ 404

4-port industrial USB hub



- > Hi-Speed USB 2.0 for up to 480 Mbps USB transmission
- > Compatible with USB 1.1 devices
- > 15N solid USB upstream connector
- > Additional I/O and IRQ not needed
- > DIN-Rail and wall mountable
- > Comprehensive diagnostic LEDs
- > Full 500 mA of power per port

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™ 404 is an industrial USB 2.0 hub that expands 1 USB port into 4. The hub is designed to provide true USB 2.0 Hi-Speed 480 Mbps data transmission through each port, even for heavy-load applications. The UPort™ 404's upstream port uses the solid, Type 15N connector to prevent the cable from becoming unplugged accidentally. Since this USB hub is fully compliant with the USB spec providing a

full 500 mA of power per port, you can rest assured that your USB devices will function properly.

The fact that the UPort™ 404 accepts 12-48 VDC power makes it ideal for mobile applications. Externally powered USB hubs are the only way to guarantee the broadest compatibility with USB devices.

Specifications

USB

- Compliance:** USB 1.1/2.0 compliant
- Upstream:** 1 USB port, Type B connector
- Downstream:** 4 USB ports, Type A connectors
- Speed:** 480 Mbps (Hi-Speed USB) and 12 Mbps (Full-Speed USB)
- Supply Current:** 500 mA max. per channel

Physical Characteristics

- Housing:** Aluminum
- Dimensions:** 80 x 35 x 130 mm (3.15 x 1.38 x 5.12 in)

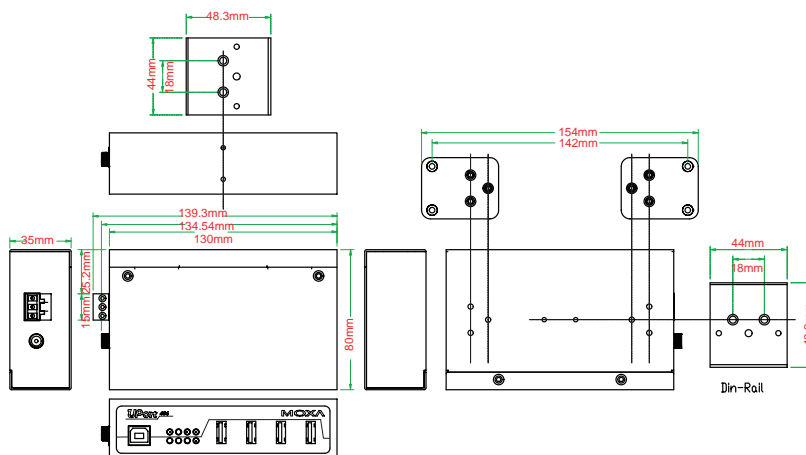
Environmental Limits

- Operating Temperature:** 0 to 70°C (32 to 158°F)
- Operating Humidity:** 5 to 95% RH
- Storage Temperature:** -20 to 75°C (-4 to 167°F)
- Power Consumption:** 1.1A @ 12 VDC max. (12 to 40 VDC external power)
- Regulatory Approvals:** EN61000-6-4, EN61000-6-2, FCC Part 15 Class A, UL508, LVD

Warranty

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

Dimensions



Ordering Information

Available Models

UPort™ 404: 4-port industrial USB hub

Package Checklist

- UPort™ 404
- USB cable
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card

11

USB Connectivity > UPort™ 404

UPort™ 407

7-port industrial USB hub



- > Hi-Speed USB 2.0 for up to 480 Mbps USB transmission
- > Compatible with USB 1.1 devices
- > 15N solid USB upstream connector
- > Additional I/O and IRQ not needed
- > DIN-Rail and wall mountable
- > Comprehensive diagnostic LEDs
- > Full 500 mA power per port

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™ 407 is an industrial USB 2.0 hub that expands 1 USB port into 7. The hub is designed to provide true USB 2.0 Hi-Speed 480 Mbps data transmission through each port, even for heavy-load applications. The UPort™ 407's upstream port uses the solid, Type 15N connector to prevent the cable from becoming unplugged accidentally. Since this USB hub is fully compliant with the USB spec providing a

full 500 mA of power per port, you can rest assured that your USB devices will function properly.

The fact that the UPort™ 407 accepts 12-48 VDC power makes it ideal for mobile applications. Externally powered USB hubs are the only way to guarantee the broadest compatibility with USB devices.

Specifications

USB

- Compliance:** USB 1.1/2.0 compliant
- Upstream:** 1 USB port, Type B connector
- Downstream:** 7 USB ports, Type A connectors
- Speed:** 480 Mbps (Hi-Speed USB) and 12 Mbps (Full-Speed USB)
- Supply Current:** 500 mA max. per channel

Physical Characteristics

- Housing:** Aluminum
- Dimensions:** 100 x 35 x 195 mm (3.94 x 1.38 x 7.68 in)

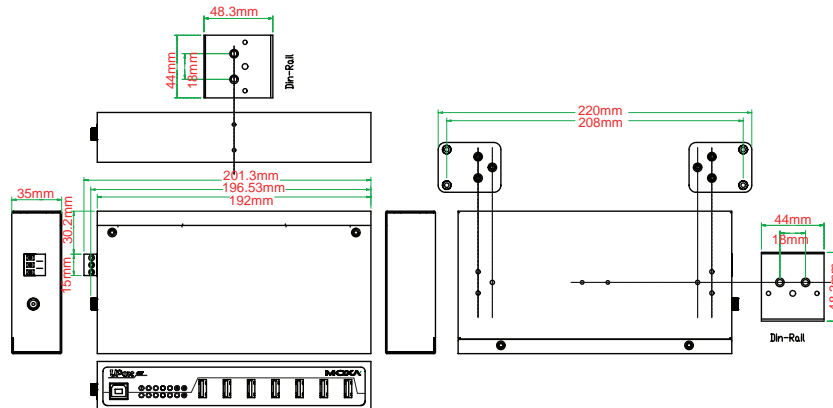
Environmental Limits

- Operating Temperature:** 0 to 70°C (32 to 158°F)
- Operating Humidity:** 5 to 95% RH
- Storage Temperature:** -20 to 75°C (-4 to 167°F)
- Power Consumption:** 1.8A @ 12 VDC max. (12 to 48 VDC external power)
- Regulatory Approvals:** EN61000-6-4, EN61000-6-2, FCC Part 15 Class A, UL508, LVD

Warranty

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

Dimensions



Ordering Information

Available Models

UPort™ 407: 7-port industrial USB hub

Package Checklist

- UPort™ 407
- USB cable
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card



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