

# UPort® 1250/1250I

**2-port RS-232/422/485 USB-to-serial converters with optional 2 kV isolation**



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
- > 15N high retention type B connector
- > Supports fixed-base COM Utility for setting the initial extended COM port number
- > Drivers provided for Windows, WinCE, and Linux
- > LEDs for easy monitoring
- > Locking power jack



## Overview

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. These plug & play USB solutions are perfect for mobile, instrumentation, and point-of-sale applications.

## 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:** 2  
**Serial Standards:** RS-232/422/485  
**Connector:** DB9 male  
**Electrical Isolation:** 2 kV (UPort 1250I only)

### Performance

**Baudrate:** 50 bps to 921.6 kbps (including 500 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:** 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)

### Operating Systems

**Windows Real COM Drivers:** Windows 2000, Windows XP/2003/Vista/2008/7/8/8.1/10 (x86/x64), Windows 2012 (x64), Windows Embedded CE 5.0/6.0

**Linux Real TTY Drivers:** Linux 2.4.x, 2.6.x, 3.x

**Android Driver:** Android 3.1.x and later

**Note:** Please refer to Moxa's website for the latest driver support information.

### Physical Characteristics

**Housing:** SECC sheet metal (1 mm)  
**Weight:**  
 Product only: 180 g (0.40 lb)  
 Packaged:  
 UPort 1250: 370 g (0.82 lb)  
 UPort 1250I: 680 g (1.5 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)  
**Storage Temperature:** -20 to 75°C (-4 to 167°F)  
**Ambient Relative Humidity:** 5 to 95% (non-condensing)

### Standards and Certifications

**Safety:** UL 60950-1  
**EMC:** EN 55022/24  
**EMI:** CISPR 22, FCC Part 15B Class A  
**EMS:**  
 IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV  
 IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m  
 IEC 61000-4-4 EFT: Power: 1 kV  
 IEC 61000-4-5 Surge: Power: 1 kV  
 IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m  
 IEC 61000-4-8 PFMF  
**Green Product:** RoHS, CRoHS, WEEE

### Power Requirements

**Input Voltage:**  
 UPort 1250: 5 VDC  
 UPort 1250I: 12 to 48 VDC  
**Input Current:**  
 UPort 1250: 360 mA @ 5 VDC  
 UPort 1250I: 200 mA @ 12 VDC

**MTBF** (mean time between failures)

Time: 563,179 hrs  
Telcordia (Bellcore), GB

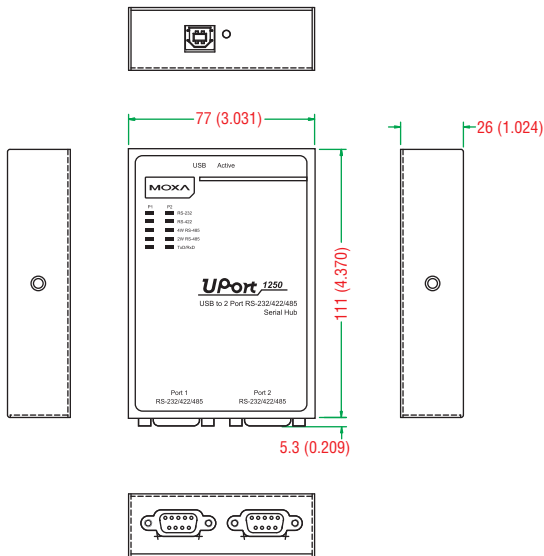
**Warranty**

Warranty Period: 5 years  
Details: See [www.moxa.com/warranty](http://www.moxa.com/warranty)

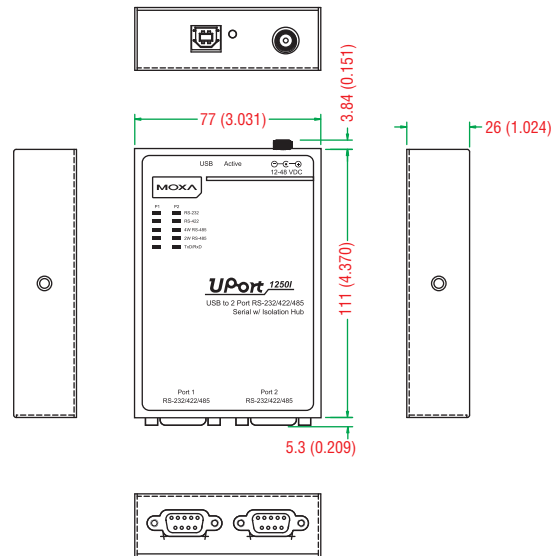
**Dimensions**

Unit: mm (inch)

**UPort® 1250**



**UPort® 1250I**



**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 electrical isolation, adaptor included

**Optional Accessories** (can be purchased separately)

- DK35A:** 35-mm DIN-rail mounting clips; 2 DIN-rail plates with 4 screws
- Mini DB9F-to-TB:** DB9 female to terminal block connector
- CBL-USBA/B-100:** USB Type A to USB Type B cable, 100 cm
- CBL-F9M9-150:** DB9 female to DB9 male serial cable, 150 cm
- CBL-F9M9-20:** DB9 female to DB9 males serial cable, 20 cm
- CBL-RJ45SF9-150:** RJ45 to DB9 female shielded serial cable, 150 cm
- ADP-RJ458P-DB9:** DB9 female to RJ45 connector
- A-ADP-RJ458P-DB9F-ABC01:** DB9 female to RJ45 connector

**DK-UP1200:** DIN-rail/wall- mounting kit that includes 2 wall-mounting plates with 6 screws (WK-35-02), and 2 DIN-rail plates with 4 screws (DK35A)

Note: One power cord suitable for your region is included in the product package. Additional power adapters and power cords can be purchased separately. Please refer to the Power Accessory Selection Guide for details.

**Package Checklist**

- 1 UPort 1250 or 1250I USB-to-serial converter
- 1 serial adapter: mini DB9F-to-TB
- USB cable: CBL-USBA/B-100
- UPort 1250I only:
  - > 100 to 240 VAC power adapter suitable for your region (excluding T models)
  - > 1 power cord suitable for your region
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

**DK-UP1200**



Available Accessory

# Power Accessory Selection Guide

Barrel Plug Type		Non-locking barrel plug		Locking barrel plug			
O/P		12 VDC, 1.5 A, 100 to 240 VAC		12 VDC, 3 A 100 to 240 VAC (Switch Mode)			
Plug Type		CN	US/JP	EU	AU	UK	CN
Model Name		PWR-12150-CN-S2	PWR-12300-WPUSJP-S1	PWR-12300-WPEU-S1	PWR-12300-WPAU-S1	PWR-12300-WPUK-S1	PWR-12300-WPCN-S1
Appearance							
2 ports	UPort 1250	-	-	-	-	-	-
	UPort 1250I	✓	-	-	-	-	-
	UPort 2210	-	-	-	-	-	-
4 ports	UPort 1410	✓	-	-	-	-	-
	UPort 1450	✓	-	-	-	-	-
	UPort 1450I	✓	-	-	-	-	-
	UPort 2410	-	-	-	-	-	-
	UPort 204	-	✓	✓	✓	✓	✓
7 ports	UPort 404	-	✓	✓	✓	✓	✓
	UPort 207	-	✓	✓	✓	✓	✓
8 ports	UPort 407	-	✓	✓	✓	✓	✓
	UPort 1610-8	✓	-	-	-	-	-
16 ports	UPort 1650-8	✓	-	-	-	-	-
	UPort 1610-16	-	-	-	-	-	-
	UPort 1650-16	-	-	-	-	-	-

Barrel Plug Type		Locking barrel plug						
O/P		12 VDC 2 A, 100 to 240 VAC (desktop type)		2.5A/250 V Power Cord, 183 cm				
Plug Type		Must be used with a power cord		US	JP	EU	AU	UK
Model Name		PWR-12125-DT-S2	PWC-C7US-2B-183	PWC-C7JP-2B-183	PWC-C7EU-2B-183	PWC-C7AU-2B-183	PWC-C7UK-2B-183	
Appearance								
2 ports	UPort 1250	✓	✓	✓	✓	✓	✓	
	UPort 1250I	✓	✓	✓	✓	✓	✓	
	UPort 2210	-	-	-	-	-	-	
4 ports	UPort 1410	✓	✓	✓	✓	✓	✓	
	UPort 1450	✓	✓	✓	✓	✓	✓	
	UPort 1450I	✓	✓	✓	✓	✓	✓	
	UPort 2410	-	-	-	-	-	-	
	UPort 204	-	-	-	-	-	-	
7 ports	UPort 404	-	-	-	-	-	-	
	UPort 207	-	-	-	-	-	-	
8 ports	UPort 407	-	-	-	-	-	-	
	UPort 1610-8	✓	✓	✓	✓	✓	✓	
16 ports	UPort 1650-8	✓	✓	✓	✓	✓	✓	
	UPort 1610-16	✓	✓	✓	✓	✓	✓	
	UPort 1650-16	✓	✓	✓	✓	✓	✓	