

UPort 1200-G2 Series

2-port RS-232/422/485 USB-to-serial converters



Features and Benefits

- USB 3.2 SuperSpeed capability
- 50 bps to 921.6 kbps baudrate (nonstandard baudrates supported)
- 512-byte on-chip FIFO cache and flow control for enhanced performance
- Double-sided LEDs located at the corners show power, TX, and RX statuses in either directions
- Drivers provided for a broad selection of operating systems, including Windows and Linux
- Latching USB cable design for firmer connection
- Wide operating temperature models available for -40 to 75°C (-40 to 167°F) environments
- Serial port with 2 kV isolation protection (for “-I” models)

Certifications



Introduction

The UPort® 1200-G2 Series USB-to-serial converters are ideal for laptop or workstation computers that need serial port expansion. They are essential for computers which need to connect different serial devices in the field or need separate interface converters for devices without a standard COM port or DB9 connector. The computers also come with a USB cable that has a latch and screw lock for a more secure connection between the UPort and your computer. The UPort® 1200-G2 Series converts from USB to RS-485. All products are compatible with legacy serial devices and can be used with instrumentation and point-of-sale applications.

Specifications

USB Interface

USB Standards	USB 3.2 Gen 1 USB 1.1/2.0 compliant
Speed	5 Gbps, 480 Mbps, 12 Mbps
No. of USB Ports	1
USB Connector	USB Type B

Serial Interface

Connector	DB9 male
Baudrate	50 bps to 921.6 kbps (supports non-standard baudrates)
FIFO	512 bytes
Parity	None, Even, Odd, Space, Mark
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Pull High/Low Resistor for RS-485	1 kilo-ohm, 150 kilo-ohms

Terminator for RS-485	120 ohms
Flow Control	RTS/CTS, XON/XOFF
RS-485 Data Direction Control	Automatic Data Direction Control (ADDC)
Surge	0.5 kV
Isolation	2 kV (I models)
Serial Standards	RS-232/422/485
No. of Ports	2

Serial Signals

RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx+, Tx-, Rx+, Rx-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND
RS-485-2w	Data+, Data-, GND

Serial Software Features

Windows Drivers	Windows 11, 10, 8.1, 8 and 7 Windows Server 2022, 2019, 2016, 2012 R2, 2012 and 2008 R2
Linux Drivers	Kernel 6.x, 5.x and 4.x
Mac Drivers	macOS version (Intel 64): 13, 12, 11 and 10.1x
Virtual Machine	VMware Fusion (Windows on macOS 13, 12, 11, 10.1x, Intel 64) VMWare ESXi (Linux kernel 4) Parallels Desktop (Windows on macOS 13, 12, 11, 10.1x, Intel 64)
Arm®-based Platform Support	Linux kernel 6.x, 5.x and 4.x
Android API	Android 3.1.x and later

Power Parameters

Input Voltage	5 VDC by USB bus power
Input Current	UPort 1250-G2 models 320 mA @ USB 3 160 mA @ USB 2 UPort 1250I-G2 models: 400 mA @ USB 3 240 mA @ USB 2

Physical Characteristics

Housing	Metal
IP Rating	IP20
Dimensions	75.8 x 25.0 x 111.0 mm (2.98 x 0.98 x 4.37 in)
Weight	UPort 1250-G2 models: 259 g (0.57 lb) UPort 1250I-G2 models: 263 g (0.58 lb)

Environmental Limits

Operating Temperature	Standard models: 0 to 60°C (32 to 140°F) -T models: -40 to 75°C (-40 to 167°F)
Storage Temperature	-40 to 75°C (-40 to 167°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

EMC	EN 55032/35
EMI	CISPR 32, 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, Signal: 0.5 kV IEC 61000-4-6 CS: 3 V; 150 kHz to 80 MHz IEC 61000-4-8 PFMF
Safety	IEC 62368-1 EN 62368-1 UL 62368-1 (CB) KC
Freefall	IEC 60068-2-31
Vibration	IEC 60068-2-6 IEC 60068-2-64
Shock	IEC 60068-2-27

Declaration

Green Product	RoHS, CRoHS, WEEE
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MTBF

Standards	Telcordia Standard SR332
Time	UPort 1250-G2 models: 2,142,392 hrs UPort 1250I-G2 models: 1,793,060 hrs

Package Contents

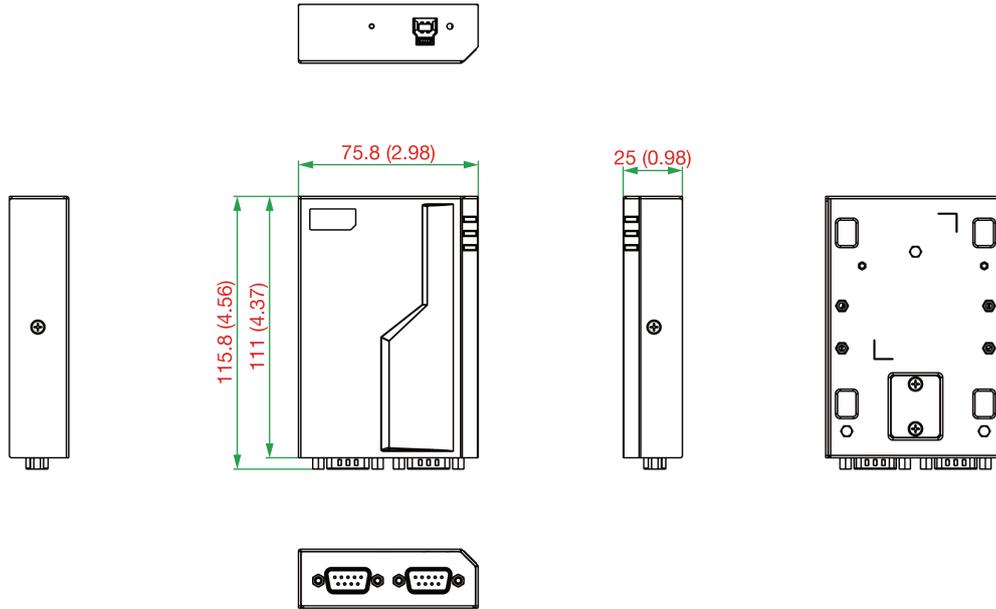
Device	1 x UPort 1200-G2
Cable	1 x USB 3.2 Gen 1 cable with latch and screw
Installation Kit	4 x rubber stand
Documentation	1 x warranty card 1 x quick installation guide

Warranty

Warranty Period	5 years Note: For product only
Details	See www.moxa.com/warranty

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	Serial Standards	No. of Serial Ports	Isolation	Power Input	Operating Temp.
UPort 1250-G2	RS-232/422/485	2	-	USB bus power	0 to 60°C
UPort 1250-G2-T	RS-232/422/485	2	-	USB bus power	-40 to 75°C
UPort 1250I-G2	RS-232/422/485	2	2 kV	USB bus power	0 to 60°C
UPort 1250I-G2-T	RS-232/422/485	2	2 kV	USB bus power	-40 to 75°C

Accessories

Cables

CBL-USB3-BA-G-120	USB 3.2 Gen 1 cable, type A-to-type B with latch and screw, 1.2 m
CBL-USB3-BA-G-028	USB 3.2 Gen 1 cable, type A-to-type B with latch and screw, 0.28 m
CBL-USB3-BA-BK-120	USB 3.2 Gen 1 cable, type A-to-type B, 1.2 m
CBL-F9M9-20	DB9 female to DB9 male serial cable, 20 cm
CBL-F9M9-150	DB9 female to DB9 male serial cable, 1.5 m

Connectors

LB-DB9F-G-01	Serial loopback DB9 adaptor
Mini DB9F-to-TB	DB9 female to terminal block connector
ADP-RJ458P-DB9F	DB9 female to RJ45 connector

DIN-Rail Mounting Kits

DK-UP1200	DIN rail (25x48.3 mm) with 2 screws (FMS M3X6)
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Wall-Mounting Kits

WK-35-02	Wall-mounting kit with 2 plates (35 x 24 x 1.2 mm) and 6 screws
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