CP-132EL/EL-I

2-port RS-422/485 PCI Express boards with optional 2 kV isolation



- > PCI Express x1 compliant
- > 921.6 kbps maximum baudrate for super fast data transmission
- > 128-byte FIFO and on-chip S/W flow control
- > Low profile form factor fits small-sized PCs
- > Drivers provided for a broad selection of operating systems, including the latest Windows and Linux
- > 15 kV ESD protection on the board















Overview

The CP-132EL and CP-132EL-I are 2-port PCI Express boards designed for industrial automation applications that require a long distance, multi-point, PC-based data acquisition solution.

RS-485 multidrop for up to 31 devices within 1.2 km

The CP-132EL/EL-I boards have 2 RS-422/485 serial ports, each of

which can achieve data rates up to 921.6 kbps. In RS-485 mode, the boards can connect up to 31 daisy-chained RS-485 devices within a range of 1.2 km. For long distance RS-485 communication, choose the CP-132EL-I model, which comes with 2 kV electrical isolation protection to prevent equipment damage.

Drivers Provided for Windows, Linux, and Unix

Moxa continues to support a wide variety of operating systems, and the CP-132EL/EL-I boards are no exception. Reliable Windows COM and Linux TTY drivers are provided for all Moxa boards, and other

operating systems, such as WEPOS, are also supported for embedded integration.

Specifications

Hardware

Comm. Controller: 16C550C compatible

Bus: PCI Express x1 Connector: DB25 female **Serial Interface** Number of Ports: 2 Serial Standards: RS-422/485 Max. No. of Boards per PC: 4

Serial Line Protection ESD Protection: 15 kV on the board Electrical Isolation: 2 kV (CP-132EL-I 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: XON/XOFF Serial Signals

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

Operating Systems

Windows Real COM Drivers: Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8/8.1 (x86/x64). Windows 2008 R2/2012/2012 R2 (x64), DOS

Fixed TTY Drivers: QNX 6, SCO OpenServer, UnixWare 7, Solaris 10

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

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

Physical Characteristics

Dimensions:

CP-132EL: 67.21 x 101.97 mm (2.65 x 4.08 in) CP-132EL-I: 67.21 x 103.97 mm (2.65 x 4.16 in)

Environmental Limits

Operating Temperature: 0 to 55°C (32 to 131°F) Storage Temperature: -20 to 85°C (-4 to 185°F) Ambient Relative Humidity: 5 to 95% (non-condensing)

Altitude: Up to 2000 m

Note: Please contact Moxa if you require products guaranteed to function properly at higher altitudes.

Standards and Certifications

EMC: CE, FCC

EMI: EN 55022, EN 61000-3-2, EN 61000-3-3, FCC Part 15 Subpart B

EMS: EN 55024, 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 (DIPS)

Green Product: RoHS, CRoHS, WEEE



MTBF (mean time between failures)

Time: 1,530,088 hrs

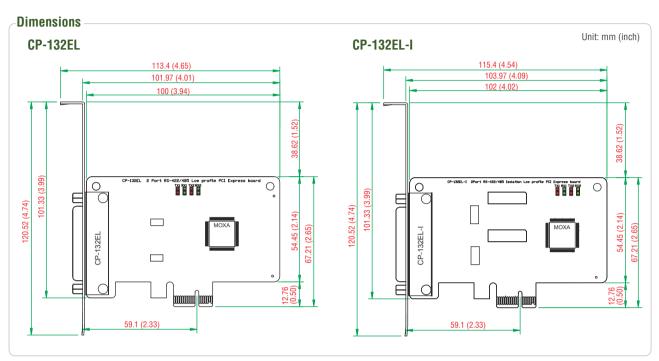
Database: Telcordia (Bellcore), GB

Power Requirements
Power Consumption:

CP-132EL: 548 mA @ 3.3 V CP-132EL-I: 636 mA @ 3.3 V Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty



Constraint 1 Ordering Information

Available Models

CP-132EL-DB9M: 2-port RS-422/485 low profile PCI Express x1 serial board (includes DB9 male cable) **CP-132EL-I-DB9M:** 2-port RS-422/485 low profile PCI Express x1 serial board with electrical isolation (includes DB9 male cable)

Package Checklist

- 1 CP-132EL or CP-132EL-I board
- · Low profile bracket
- · Documentation and software CD
- Quick installation guide (printed)
- Warranty card

Connection Options (can be purchased separately)

CBL-M25M9x2-50 DB25 male to DB9 male x 2 (50 cm cable)



PIN	RS-422/RS-485-4w	RS-485-2w
1	TxD-(A)	-
2	TxD+(B)	-
3	RxD+(B)	Data+(B)
4	RxD-(A)	Data-(A)
5	GND	GND
6	-	-
7	-	-
8	-	-

