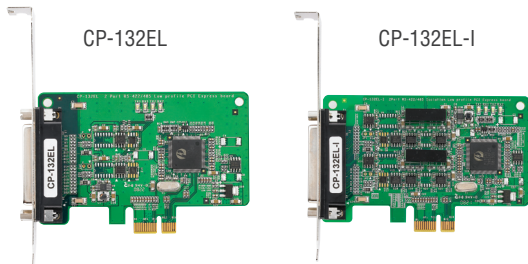


# CP-132EL/EL-I

## 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 Windows (7 x86/x64, XP/2003/Vista/2008 x86/x64, 2000), Linux 2.4, Linux 2.6 (x86/x64), Windows XP Embedded, SCO OpenServer 5/6, UnixWare 7, Solaris 10 x86/x64
- > 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 optical isolation protection to prevent equipment damage.

### Drivers Provided for Windows and Linux

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

**Optical 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

#### Driver Support

**Operating Systems:** Windows 2000, Windows XP/2003/Vista/2008/7 x86/x64, Linux 2.4, Linux 2.6 x86/x64, QNX 6, Windows XP

Embedded, SCO OpenServer 5/6, UnixWare 7, Solaris 10 x86/x64

*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)

#### Standards and Certifications

**EMC:** CE, FCC

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

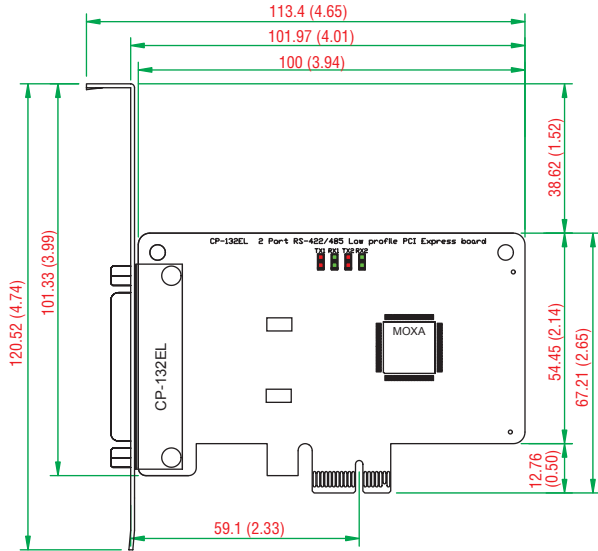
**Warranty**

**Warranty Period:** 5 years

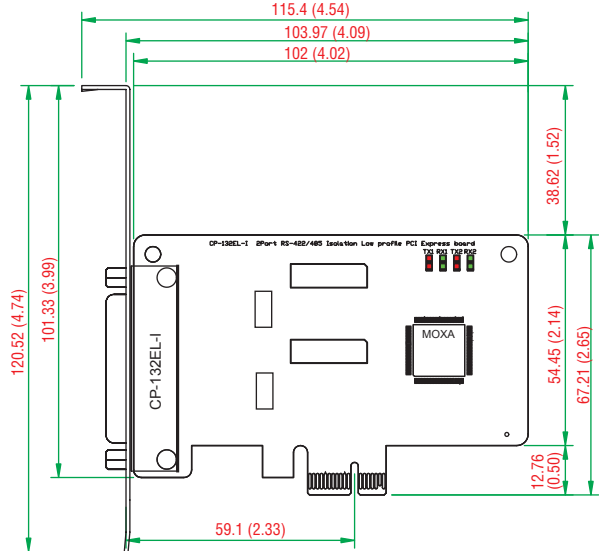
**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

**Dimensions**

**CP-132EL**



**CP-132EL-I**



Unit: mm (inch)

**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 optical 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	-	-

**DB9 male**

