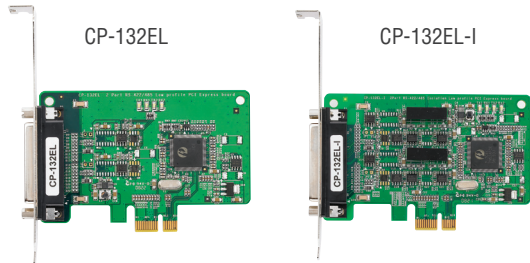


# CP-132EL/EL-I

## 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



### Overview

The CP-132EL and CP-132EL-I are 2-port PCI Express boards designed for industrial automation applications that require a long distance, multipoint, 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 and Linux 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

**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

#### 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)

##### Driver Support

**Windows:** Windows 95/98/ME/NT/2000, Windows XP/2003/ Vista/2008/7/8/8.1/10 (x86/x64), Windows 2008 R2/2012/2012 R2 (x64), DOS

**Linux:** Linux 2.4.x, 2.6.x, 3.x

**Unix-like Systems:** QNX 6, SCO OpenServer, UnixWare 7, Solaris 10

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

##### 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:** EN 55022/24

**EMI:** CISPR 22, FCC Part 15B Class B

##### 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; Signal: 0.5 kV

IEC 61000-4-5 Surge: Power: 2 kV

IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m

IEC 61000-4-8 PFMF

IEC 61000-4-11

**MTBF** (mean time between failures)

**Time:**

CP-132EL: 4,147,133 hrs

CP-132EL-I: 1,681,099 hrs

**Standard:** Telcordia (Bellcore) TR/SR

**Power Requirements**

**Input Current:**

CP-132EL: 548 mA @ 3.3 VDC

CP-132EL-I: 636 mA @ 3.3 VDC

**Warranty**

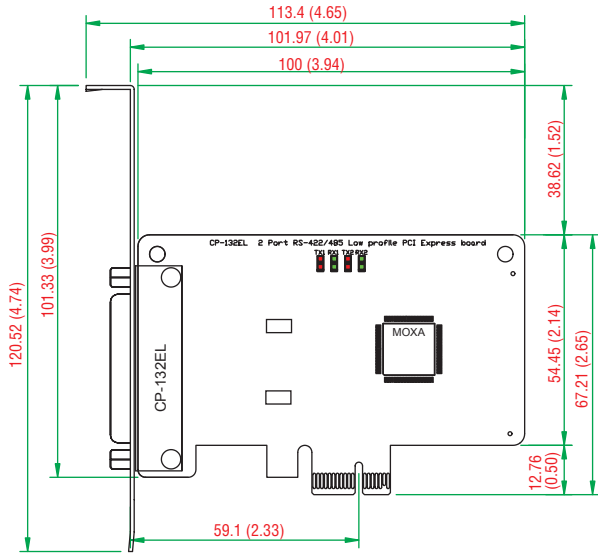
**Warranty Period:** 5 years

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

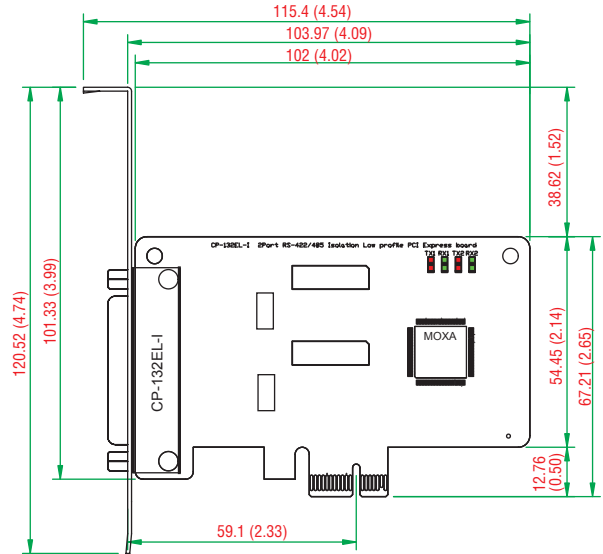
**Dimensions**

Unit: mm (inch)

**CP-132EL**



**CP-132EL-I**



**Ordering Information**

**Available Models**

**CP-132EL-DB9M:** 2-port RS-422/485 low profile PCI Express x1 serial board (CBL-M25M9x2-50 cable included)

**CP-132EL-I-DB9M:** 2-port RS-422/485 low profile PCI Express x1 serial board with electrical isolation (CBL-M25M9x2-50 cable included)

**Connection Options** (can be purchased separately)

**Low Profile Bracket:** Bracket for DB44 connector (3095010000007)

**CBL-M25M9x2-50:** M25 to 2 x DB9-M cable, 50 cm

**Package Checklist**

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

**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**

