CP-132EL/EL-I

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

CP-132EL

CP-132EL-I

- 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

PComm Lite

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 55032/24
EMI: CISPR 32, 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

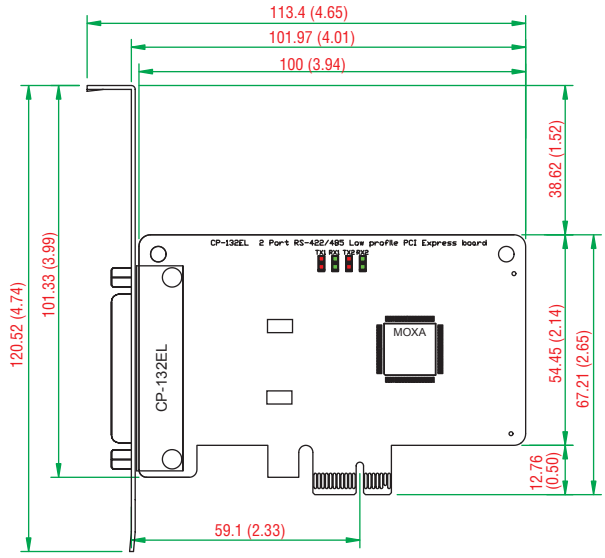
Warranty

Warranty Period: 5 years
Details: See www.moxa.com/warranty

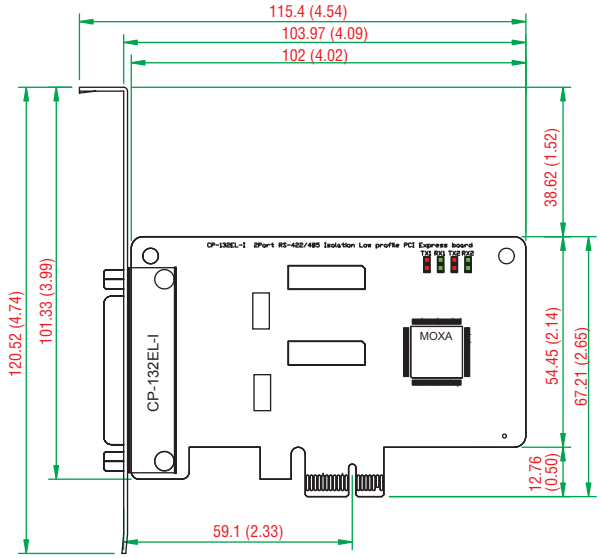
Dimensions

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