

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



Features and Benefits

- PCI Express 1.0 compliant
- 921.6 kbps maximum baudrate for 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 Windows, Linux, and UNIX
- Easy maintenance with built-in LEDs and management software

Certifications



Introduction

The CP-132EL Series of 2-port PCI Express boards are 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 Series boards have two 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 Series is 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

Serial Interface

Comm. Controller	16C550C compatible
Bus	PCI Express 1.0
Connector	DB25 female
FIFO	128 bytes
Max. No. of Boards per PC	8
No. of Ports	2
Serial Standards	RS-422, RS-485
Baudrate	50 bps to 921.6 kbps (supports non-standard baudrates)
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark

Flow Control	None, XON/XOFF
Isolation	CP-132EL-I-DB9M: 2 kV
Serial Signals	
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	DOS, Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8/8.1/10 (x86/x64), Windows 2008 R2/2012/2012 R2/2016/2019 (x64), Windows Embedded CE 5.0/6.0, Windows XP Embedded
Linux Drivers	Linux kernel 2.4.x, Linux kernel 2.6.x, Linux kernel 3.x, Linux kernel 4.x, Linux kernel 5.x
UNIX Drivers	Solaris 10, UnixWare 7, SCO OpenServer 5, SCO OpenServer 6, QNX 6
Power Parameters	
Input Current	CP-132EL-DB9M: 548 mA @ 3.3 VDC CP-132EL-I-DB9M: 636 mA @ 3.3 VDC
Physical Characteristics	
Dimensions	CP-132EL-DB9M: 67.21 x 101.97 mm (2.65 x 4.08 in) CP-132EL-I-DB9M: 67.21 x 103.97 mm (2.65 x 4.16 in)
LED Interface	
LED Indicators	Built-in Tx, Rx LEDs for each port
Environmental Limits	
Operating Temperature	0 to 55°C (32 to 131°F)
Storage Temperature (package included)	-20 to 85°C (-4 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
Standards and Certifications	
EMC	EN 55032/35
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
Declaration	
Green Product	RoHS, CRoHS, WEEE
MTBF	
Time	CP-132EL-DB9M: 4,147,133 hrs CP-132EL-I-DB9M: 1,681,099 hrs
Standards	Telcordia (Bellcore) Standard TR/SR

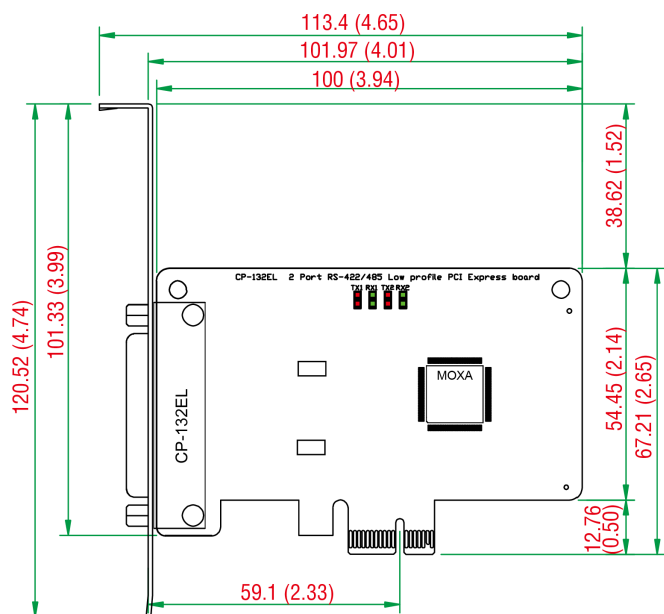
Warranty	
Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents	
Device	1 x CP-132EL Series serial board
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

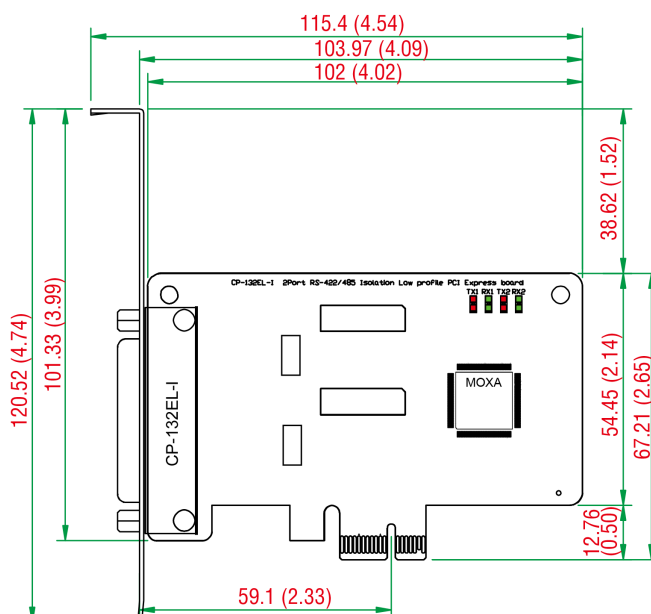
CP-132EL

Unit: mm (inch)



CP-132EL-I

Unit: mm (inch)



Ordering Information

Model Name	Serial Standards	No. of Serial Ports	Isolation	Included Cable
CP-132EL-DB9M	RS-422/485	2	–	CBL-M25M9x2-50
CP-132EL-I-DB9M	RS-422/485	2	2 kV	CBL-M25M9x2-50

Accessories (sold separately)

Connectors	
Mini DB9F-to-TB	DB9 female to terminal block connector
Cables	
CBL-M25M9x2-50	M25 to 2 x DB9 male serial cable, 50 cm

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