

## CP-132EL Series

*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 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 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/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

#### 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
<b>Serial Signals</b>	
RS-422	Tx+, Tx-, Rx+, Rx-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND
RS-485-2w	Data+, Data-, GND
<b>Serial Software Features</b>	
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 (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
UNIX Drivers	Solaris 10, UnixWare 7, SCO OpenServer 5, SCO OpenServer 6, QNX 6
<b>Power Parameters</b>	
Input Current	CP-132EL-DB9M: 548 mA @ 3.3 VDC CP-132EL-I-DB9M: 636 mA @ 3.3 VDC
<b>Physical Characteristics</b>	
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)
<b>LED Interface</b>	
LED Indicators	Built-in Tx, Rx LEDs for each port
<b>Environmental Limits</b>	
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)
<b>Standards and Certifications</b>	
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
<b>Declaration</b>	
Green Product	RoHS, CRoHS, WEEE
<b>MTBF</b>	
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 <a href="http://www.moxa.com/warranty">www.moxa.com/warranty</a>

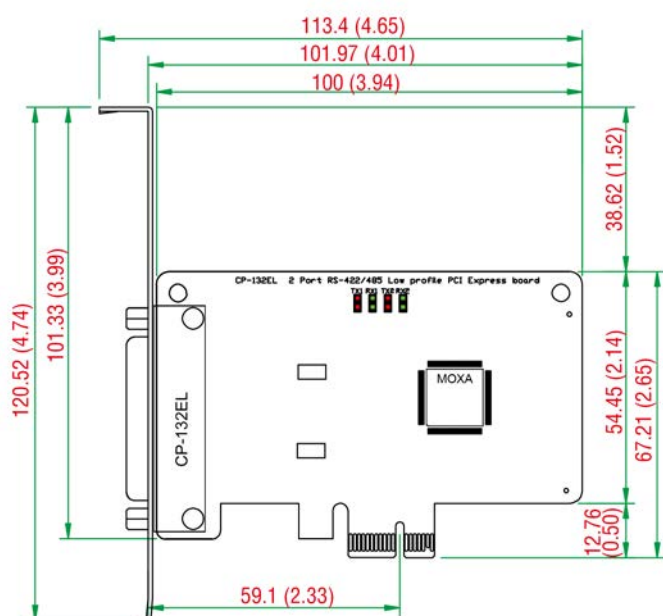
## Package Contents

Device	1 x CP-132EL Series serial board
Documentation	1 x document and software CD 1 x quick installation guide 1 x warranty card

## Dimensions

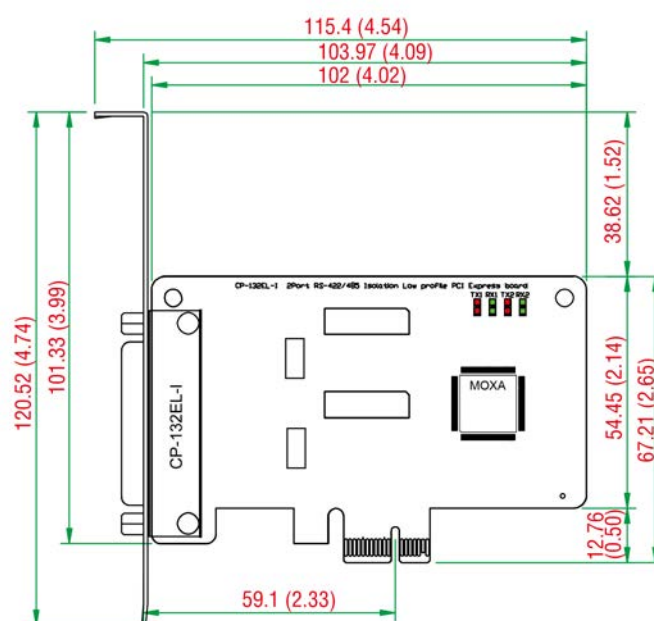
### CP-132EL

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)

### Brackets

3095010000007	Bracket for DB44 pack
---------------	-----------------------

### Cables

CBL-M25M9x2-50	M25 to 2 x DB9 male cable, 50 cm
----------------	----------------------------------

### Connectors

Mini DB9F-to-TB	DB9 female to terminal block connector
-----------------	--