# **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

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### 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		
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 (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 55032/24	
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	
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

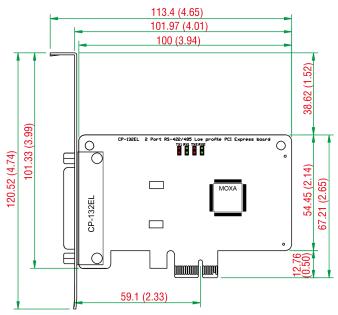
Warranty Period	5 years
Details	See www.moxa.com/warranty
Package Contents	
Device	1 x CP-132EL Series serial board
Documentation	1 x document and software CD 1 x quick installation guide 1 x warranty card

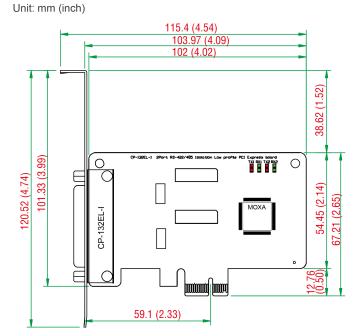
## **Dimensions**

#### CP-132EL

#### 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
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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