

# CP-114EL Series

4-port RS-232/422/485 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 H/W, 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-114EL and CP-114EL-I are smart, 4-port PCI Express boards designed for POS and ATM applications. The boards are a top choice of industrial automation engineers and system integrators, and support many different operating systems, including Windows, Linux, and UNIX. In addition, each of the boards' 4 RS-232/422/485 serial ports supports a fast 921.6 kbps baudrate. The CP-114EL and CP-114EL-I provide full modem control signals to ensure compatibility with a wide range of serial peripherals, and their PCI Express x1 classification allows the boards to be installed in any PCI Express slot.

## Smaller Form Factor

The CP-114EL and CP-114EL-I are low-profile boards that are compatible with any PCI Express slot. The boards require only a 3.3 VDC power supply, which means that the boards fit any host computer, ranging from shoebox to standard-sized PCs.

## Drivers Provided for Windows, Linux, and UNIX

Moxa continues to support a wide variety of operating systems, and the CP-114EL/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	DB44 female
FIFO	128 bytes
Max. No. of Boards per PC	8
No. of Ports	4
Serial Standards	RS-232, 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, RTS/CTS, XON/XOFF
Isolation	CP-114EL-I Series: 2 kV
<b>Serial Signals</b>	
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
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, Linux kernel 4.x, Linux kernel 5.x
UNIX Drivers	QNX 6, Solaris 10, UnixWare 7, SCO OpenServer 5, SCO OpenServer 6
<b>Power Parameters</b>	
Input Current	CP-114EL Series: 835 mA @ 3.3 VDC CP-114EL-I Series: 1,170 mA @ 3.3 VDC
<b>Physical Characteristics</b>	
Dimensions	CP-114EL Series: 67.21 x 103 mm (2.65 x 4.06 in) CP-114EL-I Series: 67.21 x 135 mm (2.65 x 5.31 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-114EL Series: 2,347,197 hrs CP-114EL-I Series: 603,671 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>

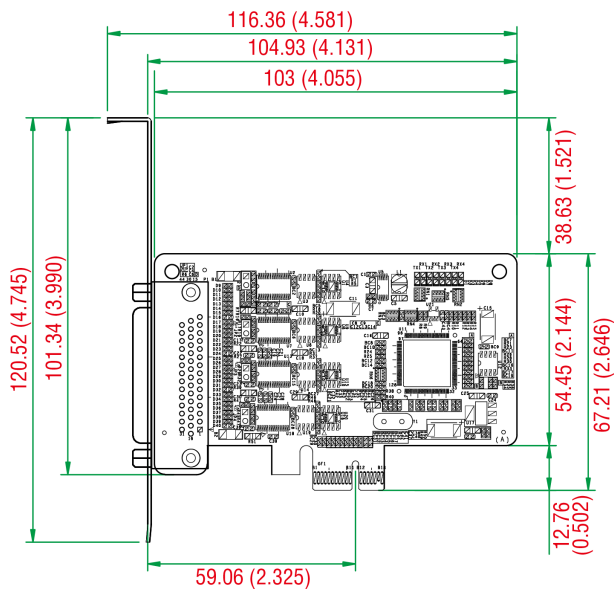
## Package Contents

Device	1 x CP-114EL Series serial board
Cable	1 x M44 to 4 x DB9-M cable, 50 cm (-DB9M models) 1 x M44 to 4 x DB25-M cable, 50 cm (-DB25M models)
Documentation	1 x document and software CD 1 x quick installation guide 1 x warranty card

## Dimensions

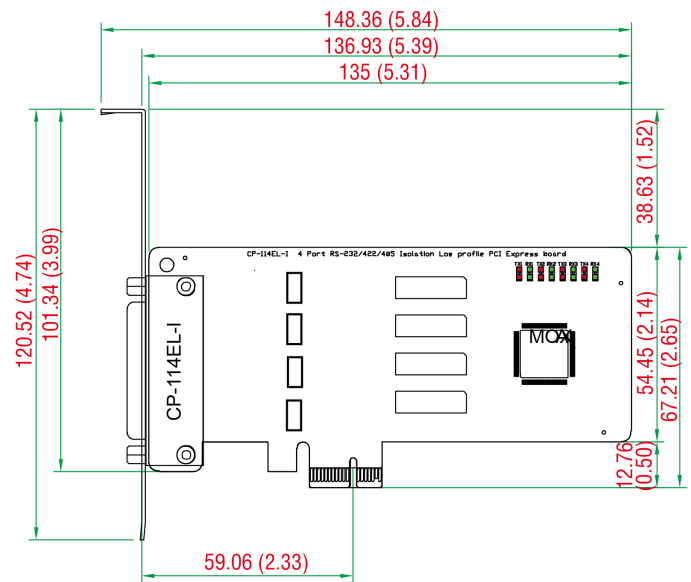
### CP-114EL

Unit: mm (inch)



### CP-114EL-I

Unit: mm (inch)



## Ordering Information

Model Name	Serial Standards	No. of Serial Ports	Isolation	Included Cable
CP-114EL	RS-232/422/485	4	-	-
CP-114EL-I	RS-232/422/485	4	2 kV	-
CP-114EL-DB9M	RS-232/422/485	4	-	CBL-M44M9x4-50
CP-114EL-DB25M	RS-232/422/485	4	-	CBL-M44M25x4-50
CP-114EL-I-DB9M	RS-232/422/485	4	2 kV	CBL-M44M9x4-50
CP-114EL-I-DB25M	RS-232/422/485	4	2 kV	CBL-M44M25x4-50

## Accessories (sold separately)

### Brackets

309501000007

Bracket for DB44 pack

### Cables

CBL-F9M9-150	DB9 female to DB9 male serial cable, 1.5 m
CBL-F9M9-20	DB9 female to DB9 male serial cable, 20 cm
CBL-M44M9x4-50	DB44 male to DB9 male serial cable, 50 cm
CBL-M44M25x4-50	M44 to 4 x DB25 male serial cable, 50 cm

#### Connectors

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