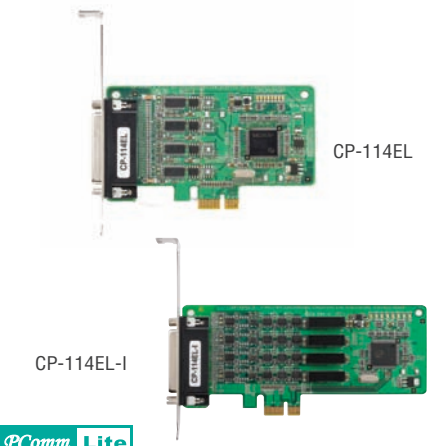



# CP-114EL/EL-I

4-port RS-232/422/485 PCI Express boards with optional 2 KV isolation



- > PCI Express x1 compliant
- > 921.6 Kbps maximum baudrate for super 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 Windows (7 x86/x64, XP/2003/Vista/2008 x86/x64, 2000), Linux 2.4, Linux 2.6 (x86/x64), QNX 6, Windows XP Embedded, SCO OpenServer 5/6, UnixWare 7, Solaris 10 x86/x64
- > 15 KV ESD protection on the board



## Overview

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 and Linux. In

addition, each of the boards' 4 RS-232/422/485 serial ports supports a super 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

Moxa continues to support a wide variety of operating systems, and the CP-114EL/EL-I boards are no exception. Reliable Windows COM

and Linux TTY 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:** DB44 female

### Serial Interface

**Number of Ports:** 4

**Serial Standards:** RS-232/422/485

**Max. No. of Boards per PC:** 4

### Serial Line Protection

**ESD Protection:** 15 KV on the board

**Optical Isolation:** 2 KV (CP-114EL-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:** RTS/CTS, XON/XOFF

### Serial Signals

**RS-232:** TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

**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

### Driver Support

**Operating Systems:** Windows 2000, Windows XP/2003/Vista/2008/7/x86/x64, DOS, Linux 2.4, Linux 2.6 x86/x64, QNX 6, Windows XP Embedded, SCO OpenServer 5/6, UnixWare 7, Solaris 10 x86/x64

*Note: Please refer to Moxa's website for the latest driver support information.*

### Physical Characteristics

#### Dimensions:

CP-114EL: 67.21 x 103 mm (2.69 x 4.06 in)

CP-114EL-I: 67.21 x 135 mm (2.69 x 5.31 in)

### 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:** CE, FCC  
**EMI:** EN 55022, EN 61000-3-2, EN 61000-3-3, FCC Part 15 Subpart B Class B  
**EMS:** EN 55024, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11 (DIPS)  
**Green Product:** RoHS, CRoHS, WEEE  
**MTBF** (mean time between failures)  
**Time:** 684,289 hrs  
**Database:** Telcordia (Bellcore), GB

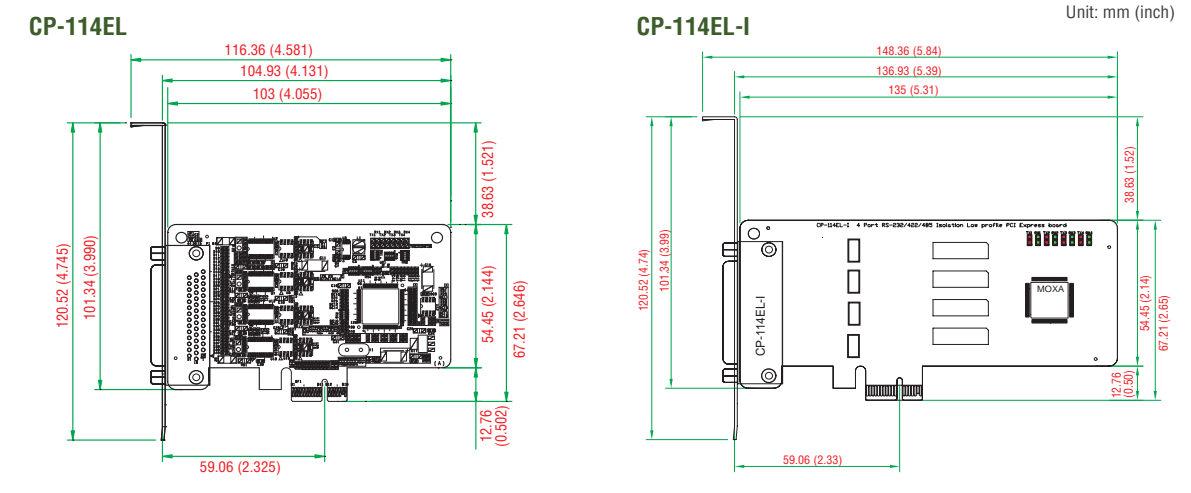
## Power Requirements

**Power Consumption:**  
 CP-114EL: 835 mA @ 3.3 V  
 CP-114EL-I: 1170 mA @ 3.3 V

## Warranty

**Warranty Period:** 5 years  
**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

## Dimensions



## Ordering Information

### Available Models

**CP-114EL:** 4-port RS-232/422/485 low profile PCI Express x1 serial board  
**CP-114EL-I:** 4-port RS-232/422/485 low profile PCI Express x1 serial board with optical isolation  
**CP-114EL-DB9M:** 4-port RS-232/422/485 low profile PCI Express x1 serial board (includes DB9 male cable)  
**CP-114EL-DB25M:** 4-port RS-232/422/485 low profile PCI Express x1 serial board (includes DB25 male cable)  
**CP-114EL-I-DB9M:** 4-port RS-232/422/485 low profile PCI Express x1 serial board with optical isolation (includes DB9 male cable)  
**CP-114EL-I-DB25M:** 4-port RS-232/422/485 low profile PCI Express x1 serial board with optical isolation (includes DB25 male cable)

### Package Checklist

- 1 CP-114EL or CP-114EL-I board
- Standard bracket and low profile bracket
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

### Connection Options (can be purchased separately)

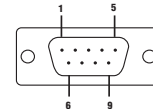
#### CBL-M44M9x4-50

DB44 male to DB9 male x 4 (50 cm cable)



PIN	RS-232	RS-422	RS-485-4w	RS-485-2w
1	DCD	TxD-(A)	TxD-(A)	-
2	RxD	TxD+(B)	TxD+(B)	-
3	TxD	RxD+(B)	RxD+(B)	Data+(B)
4	DTR	RxD-(A)	RxD-(A)	Data-(A)
5	GND	GND	GND	GND
6	DSR	-	-	-
7	RTS	-	-	-
8	CTS	-	-	-
9	-	-	-	-

#### DB9 male



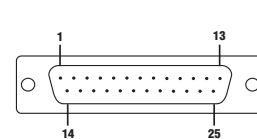
#### CBL-M44M25x4-50

DB44 male to DB25 male x 4 (50 cm cable)



PIN	RS-232	RS-422	RS-485-4w	RS-485-2w
2	TxD	RxD+(B)	RxD+(B)	Data+(B)
3	RxD	TxD+(B)	TxD+(B)	-
4	RTS	-	-	-
5	CTS	-	-	-
6	DSR	-	-	-
7	GND	GND	GND	GND
8	DCD	TxD-(A)	TxD-(A)	-
20	DTR	RxD-(A)	RxD-(A)	Data-(A)
22	-	-	-	-

#### DB25 male



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