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 and Linux
- Easy maintenance with built-in LEDs and management software

Certifications

Introduction

The CP-114EL Series of smart, 4-port PCI Express boards designed for POS and ATM applications 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 fast 921.6 kbps baudrate. The CP-114EL Series provides 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 Series uses 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 and Linux

Moxa continues to support a wide variety of operating systems, and the CP-114EL 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	DB44 female
FIFO	128 bytes
Max. No. of Boards per PC	4
No. of Ports	4
Serial Standards	RS-232 RS-422 RS-485
Bitrate	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 models: 2 kV

Serial Signals

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

Serial Software Features

Windows Drivers	Windows 11, 10, 8.1, 8 and 7 Windows Server 2025, Server 2019, Server 2016, Server 2012 R2, Server 2012, and Server 2008 R2
Linux Drivers	Linux kernel 7.x, 6.x, 5.x, and 4.x
Arm®-based Platform Support	Linux kernel 7.x, 6.x, 5.x, and 4.x

Power Parameters

Input Current	CP-114EL models: 835 mA @ 3.3 VDC CP-114EL-I models: 1,170 mA @ 3.3 VDC

Physical Characteristics

Dimensions	CP-114EL models: 67.21 x 103 mm (2.65 x 4.06 in) CP-114EL-I models: 67.21 x 135 mm (2.65 x 5.31 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-114EL models: 2,347,197 hrs CP-114EL-I models: 603,671 hrs
Standards	Telcordia (Bellcore) Standard TR/SR

Warranty

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

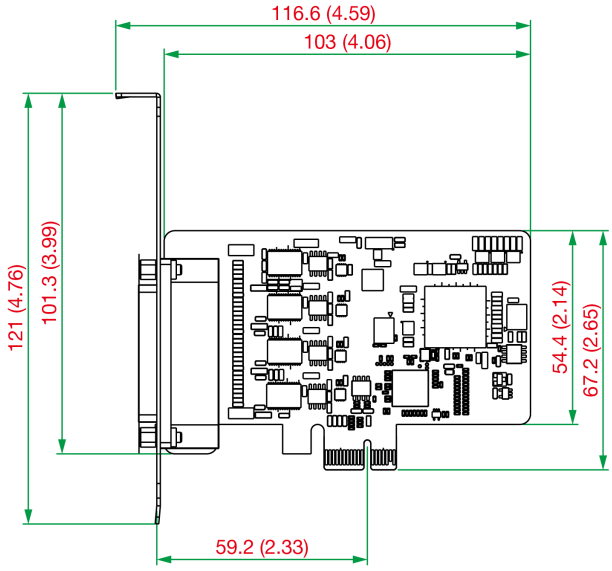
Package Contents

Device	1 x CP-114EL Series serial board
Cable	CP-114EL-DB9M: 1 x M44 to 4 x DB9-M cable, 50 cm CP-114EL-I-DB9M: 1 x M44 to 4 x DB9-M cable, 50 cm CP-114EL-DB25M: 1 x M44 to 4 x DB25-M cable, 50 cm CP-114EL-I-DB25M: 1 x M44 to 4 x DB25-M cable, 50 cm
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

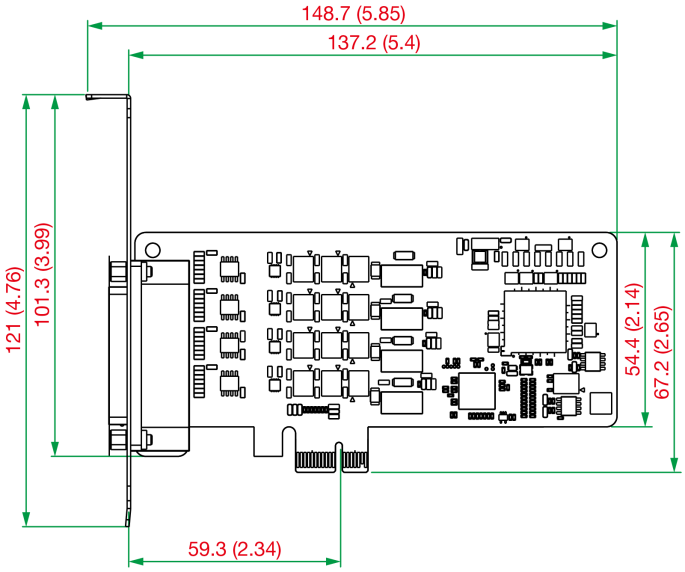
CP-114EL

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)

Cables

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
CBL-F9M9-20	DB9 female to DB9 male serial cable, 20 cm
CBL-F9M9-150	DB9 female to DB9 male serial cable, 1.5 m

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