# **CP-102E/EL**

# 2-port RS-232 PCI Express boards



- > 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 a broad selection of operating systems, including the latest Windows and Linux















#### **Overview**

The CP-102E and low-profile CP-102EL are 2-port PCI Express boards designed for POS and ATM applications. Moxa's PCI Express boards are a top choice of industrial automation engineers and system integrators, particularly since the boards support many different

operating systems, including Windows and Linux. The CP-102E/EL's 2 RS-232 serial ports support a superfast 921.6 kbps baudrate and provide full modem control signals to ensure compatibility with a wide range of serial peripherals. In addition, the boards' x1 classification allows them to be installed in any PCI Express slot.

### **Smaller Form Factor**

The CP-102EL is a low-profile board that is compatible with any PCI Express slot. The CP-102EL board only requires a 3.3 VDC power

supply, which means that the board fits 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-102E/EL 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 applications.

#### : Specifications

#### **Hardware**

Comm. Controller: 16C550C compatible

Bus: PCI Express x 1

Connector: CP-102E: DB9 male x 2

CP-102EL: DB25 female **Serial Interface** 

Number of Ports: 2 Serial Standards: RS-232 Max. No. of Boards per PC: 8

**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, RTS Toggle (RS-232 only)

#### Serial Signals

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

#### **Physical Characteristics**

**Dimensions:** 

CP-102E: 85.04 x 100 mm (3.35 x 3.94 in) CP-102EL: 67.21 x 100 mm (2.65 x 3.94 in)

Driver Support

Windows: Windows 95/98/ME/NT/2000, Windows XP/2003/ Vista/2008/7/8/8.1/10 (x86/x64), Windows Server 2008 R2/2012/2012

R2/2016 (x64), DOS

**Linux:** Linux 2.4.x, 2.6.x, 3.x

Unix-like Systems: QNX 6, SCO OpenServer, UnixWare 7, Solaris 10 Note: Please refer to Moxa's website for the latest driver support information.

#### **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**: EN 55032/24

EMI: CP-102E: CISPR 32, FCC Part 15B Class A CP-102EL: 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 IEC 61000-4-11 MTBF (mean time between failures)

**Time:** 4,947,552 hrs

Standard: Telcordia (Bellcore) TR/SR

**Power Requirements** 

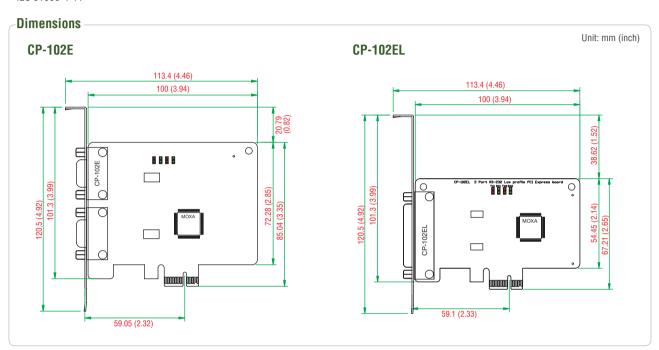
Input Current:

CP-102E: 520 mA @ 3.3 VDC CP-102EL: 552 mA @ 3.3 VDC

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty



# Ordering Information

#### **Available Models**

CP-102E: 2-port RS-232 PCI Express x1 serial board

CP-102EL-DB9M: 2-port RS-232 low profile PCI Express serial board (CBL-M25M9x2-50 cable included)

**Connection Options** (can be purchased separately)

Low Profile Bracket: Bracket for DB44 connector (1490000001000)

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

#### CBL-M25M9x2-50

DB25 male to DB9 male x 2 (50 cm cable)



PIN	RS-232
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS



#### Package Checklist

- 1 CP-102E or CP-102EL board
- Low profile bracket (CP-102EL only)
- 1 connection cable (optional)
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card