# **CA-114 Series**

## 4-port RS-232/422/485 PC/104 modules



- > 921.6 Kbps maximum baudrate for super fast data transmission
- > On-chip H/W and S/W flow control
- > Built-in 15 KV ESD protection
- > IRQ settings, I/O settings, and serial interface are jumper and DIP switch selectable
- > Onboard Tx and Rx LED indicators for each port
- > Windows CE 5.0/6.0 and Windows XP embedded operating systems supported
- > Wide temperature model available for -40 to 85°C environments











## Overview

The CA-114 PC/104 modules are reliable, high performance, multiport serial communication solutions that have 4 RS-232/422/485 ports, and can be used with PC/104 CPU boards that accept the PC/104

expansion interface. Optional DB9 and DB25 connection cables are available for connecting to serial devices, and the CA-114s' versatile driver support makes the modules suitable for a wide range of applications.

### **Specifications**

#### **Hardware**

Comm. Controller: 16C550C or compatible x 4

Bus: PC/104 bus

Connector: 40-pin box header

DIP Switches: I/O base address, interrupt vector, serial interface

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

**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

**IRQ:** 3, 4, 5, 6, 7, 9, 10, 11, 12, 15 (shared for all ports)

FIFO: 64 bytes 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 9X/ME/NT/2000, Windows XP/2003 x86/x64, Windows CE 5.0/6.0, Windows XP Embedded, DOS, Linux 2.4. Linux 2.6 x86/x64. QNX 4/6

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

**Physical Characteristics** 

**Dimensions:** 90 x 96 mm (3.54 x 3.78 in)

**Environmental Limits Operating Temperature:** 

Standard Models: 0 to 55°C (32 to 131°F) Wide Temp. Models: -40 to 85°C (-40 to 185°F) Storage Temperature: -40 to 85°C (-40 to 185°F) Ambient Relative Humidity: 5 to 95% (non-condensing)

Altitude: Up to 2000 m

Note: Please contact Moxa if you require products guaranteed to function properly at higher altitudes

#### **Standards and Certifications**

EMC: CE, FCC

EMI: EN 55022, EN 61000-3-2, EN 61000-3-3, FCC Part 15 Subpart B

Class A

EMS: EN 55024, IEC 61000-6-2, IEC 61000-6-4, 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: 630,997 hrs

Database: Telcordia (Bellcore), GB **Power Requirements** 

Power Consumption: 305 mA @ 5 VDC

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

## **Ordering Information**

#### Available Models

**CA-114:** 4-port RS-232/422/485 PC/104 module, 0 to 55°C operating temperature CA-114-T: 4-port RS-232/422/485 PC/104 module, -40 to 85°C operating temperature

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

CBL-F40M9x4-50: 40-pin box header to DB9 male x 4 connection cable, 50 cm CBL-F40M25x4-50: 40-pin box header to DB25 male x 4 connection cable, 50 cm

#### Package Checklist

- 1 CA-114 or CA-114-T module
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

