# **CP-104N Series**

# 4-port RS-232 Mini PCI Express boards



#### **Features and Benefits**

- Mini PCIe interface support
- 921.6 kbps maximum baudrate for fast data transmission
- 128-byte FIFO and on-chip H/W, S/W flow control
- Drivers provided for a broad selection of operating systems, including Windows and Linux



## Introduction

The CP-104N is a Mini PCI Express multiport serial board designed for varies applications such as industrial automation system and industrial PC manufacturers. The CP-104N is compatible with any Mini PCI Express slot. The board requires only a 3.3 VDC power supply, which means it can work with host computers ranging from DIN-rail PCs to standard-sized PCs.

The CP-104N is a top choice of industrial automation engineers and system integrators and supports Windows and Linux operating systems. In addition, the four RS-232 serial ports support a fast 921.6 kbps baudrate. The CP-104N provides full-modem control signals to ensure compatibility with a wide range of serial peripherals. It also provides 1 kV line-to-line surge protection and 2.5 kV isolation (for the I model), ensuring compatibility in a wide range of industrial environments.

#### A New Family of Mini PCI Express Multiport Serial Boards for Faster Time to Market

Moxa's new Mini PCI Express multiport serial board family fulfills the need for customized expansion and enables faster time to market for OEMs and system integrators. It includes Isolated and non-Isolated RS-232/422/485 communication cards for various applications.

The serial boards feature high performance 16C950 compatible UARTs and are available in 4-port and 2-port versions compatible with all popular operating systems. They support data rates of up to 921.6 kbps and have 128-byte transmit and receive FIFOs. The serial boards can operate in the -40 to 85°C temperature range. Door backets are included in the package for all models, enabling the installation of the serial boards in a Moxa IPC expansion slot.

## **Specifications**

Serial Interface	
Comm. Controller	16C550C compatible
Bus	Mini PCI Express
Connector	DB9 male
FIFO	128 bytes
No. of Ports	4
Serial Standards	RS-232
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



Fixed Control         None, FRS/CTS, XON/XOFF           Isolation         2.5 kV (models)           Serial Signals         TxD, FkD, RTS, CTS, DTR, DSR, DCD, GND           Serial Software Features         Vindows 70/8, 1710/11 (p88/x64), Windows 2008 F2/2012/2012 F2/2016/2019 (n64), Windows Sarver 2022           Linux Drivers         Linux kernel 4.x, Linux kernel 6.x           Power Parameters         Environmental           Input Current         CP-104N-T, 368 mA & 2.3 VDG           Physical Characteristics         Environmental Limits           Operating Temperature (gaskage included)         -40 to 85°C (-40 to 185°F)           Storage Temperature (gaskage included)         -20 to 89°C (-41 to 185°F)           Storage Temperature (gaskage included)         -20 to 89°C (-41 to 185°F)           Storage Temperature (gaskage included)         -20 to 89°C (-41 to 185°F)           Storage Temperature (gaskage included)         -20 to 89°C (-41 to 185°F)           Storage Temperature (gaskage included)         -20 to 89°C (-41 to 185°F)           Storage Temperature (gaskage included)         -20 to 89°C (-41 to 185°F)           Storage Temperature (gaskage included)         -20 to 89°C (-41 to 185°F)           Storage Temperature (gaskage included)         -20 to 89°C (-41 to 185°F)           Storage Temperature (gaskage included)         -20 to 89°C (-41 to 185°F)           <			
Image:         Image:           Serial Signals         TxD, RAD, RTS, CTS, DTR, DSR, DCD, GND           Serial Software Features         Vindows 270/8.1/10/11 (x80/x64), Windows 2008 R2/2012/2012 R2/2018/2019 (x64), Windows 2008 R2/2011, Windows 2008 R2/2012/2012 R2/2018/2010 R2/2012 R2/2018/2019 R2/2019/2014/2019 R2/2019/2019/2019/2019/2019/2019/2019/201	Flow Control	None, RTS/CTS, XON/XOFF	
RB-222     TxD, RxD, RTS, CTS, DTP, DSR, DCD, GND       Serial Software Features     Windows 7/8/8 1/10/11 p68/x64/, Windows 2008 R2/2012/2012 R2/2016/2019 (x64), Windows Server 2022       Linux Drivers     Linux Kernel 5.x       Power Parameters     Input Current       Input Current     CP-104N-T: 365 mA 8 3.3 VDC CP-104N-T: 615 mA e 3.3 VDC       Physical Characteristics     Dimensions       Dimensions     30 x 50.95 mm (1.18 x 2 in)       Environmental Limits	Isolation		
Serial Software Features       Windows Drivers     Windows 2008 R2/2012/2012 R2/2019/2019 (x64), Windows Server 2022       Linux Drivers     Linux kernel 4.x, Linux kernel 5.x       Power Parameters     Power 2022       Input Current     CP-104N-T: 365 mA 6 3.3 VDC CP-104N-T: 615 mA 6 3.3 VDC CP-104N-T: 615 mA 6 3.3 VDC       Physical Characteristics     Dower 2022       Dimensions     80 x 50.96 mm (1.18 x 2 in)       Environmental Limits     -       Operature (package included)     -20 to 85°C (-4 to 185°F)       Antient Relative Humidity     40 to 85°C (-4 to 185°F)       Standards and Cortifications     E       EMC     EN50302/35       EMS     E0 (SER 32, FCC Part 15B Class A       EMS     E0 (SER 32, FCC Part 15B Class A       EMS     E0 (SER 32, FCC Part 15B Class A       EMS     E0 (SER 32, FCC Part 15B Class A       EMS     E0 (SER 32, FCC Part 15B Class A       EMS     E0 (SER 32, FCC Part 15B Class A       EMS     E0 (SER 32, FCC Part 15B Class A       EMS     E0 (SER 32, FCC Part 15B Class A       EMS     E0 (SER 32, FCC Part 15B Class A       E0 (SER 32, FCC Part 15B Class A     EC (SER 32, FCC Part 15B Class A       E0 (SER 32, FCC Part 15B Class A     EC (SER 32, FCC Part 15B Class A       E0 (SER 32, FCC Part 15B Class A     EC (SER 32, FCC Part 15B Class A	Serial Signals		
Windows Onivers         Windows 7/8/8.1/10/11 (x88/x64), Windows 2008 R2/2012/2012 R2/2016/2019 (x64), Windows Server 2022           Linux Drivers         Linux kernel 4.x, Linux kernel 5.x           Power Parameters         Power Parameters           Input Current         CP-104N-T: 385 mA & 3.3 VDC CP-104N-T: 355 mA & 3.3 VDC           Physical Characteristics         Dimensions           Dimensions         30 x 50.95 mm (1.18 x 2 in)           Environmental Limits         Operating Temperature (package included)           Operating Temperature (package included)         -20 to 85°C (-40 to 185°F)           Ambient Relative Humidity         5 to 95% (non-condensing)           Standards and Certifications         EN           ENC         EN 55032/36           EMI         CISPR 32, FCC Part 15B Class A           EMS         IEC 61000-4.2 ESD; Contact: 4 KY: Air: 8 KV IEC 61000-4.3 FRS: 0M Kr to 16 KFz: 3 V/m IEC 61000-4.4 EFT; Power: 1 KY; Signal: 3 V/m IEC 61000-4.4 EFT; Power: 1 KY; Signal: 3 V/m IEC 61000-4.4 EFT; Power: 1 KY; Signal: 3 V/m IEC 61000-4.0 CS: 1000 KHz: 3 V/m; Signal: 3 V/m IEC 61000-4.0 CS: 1000 KHz: 3 V/m; Signal: 3 V/m IEC 61000-4.0 CS: 1000 KHz: 3 V/m; Signal: 3 V/m IEC 61000-4.0 CS: 1000 KHz: 3 V/m; Signal: 3 V/m IEC 61000-4.0 CS: 1000 KHz: 3 V/m; Signal: 3 V/m IEC 61000-4.0 CS: 1000 KHz: 3 V/m; Signal: 3 V/m IEC 61000-4.0 CS: 1000 KHz: 3 V/m; Signal: 3 V/m IEC 61000-4.0 CS: 1000 KHz: 3 V/m; Signal: 3 V/m IEC 61000-4.0 CS: 1000 KHz: 3 V/m; Signal: 3 V/m IEC 61000-4.0 CS: 1000 KHz: 3 V/m; Signal: 3 V/m IEC 61000-4 CS: 1000 KHz: 3 V/m; Signal: 3 V	RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND	
Linux Drivers         Linux kernel 4.x. Linux kernel 5.x           Power Parameters         CP-104N-T: 365 mA @ 3.3 VDC CP-104N-T: 615 mA @ 3.3 VDC CP-104N-T:	Serial Software Features		
Power Parameters           Input Current         CP-104N-T: 365 mA @ 3.3 VDC CP-104N-I-T: 615 mA @ 3.3 VDC           Physical Characteristics         30 x 50.95 mm (1.18 x 2 in)           Dimensions         30 x 50.95 mm (1.18 x 2 in)           Environmental Limits         -40 to 85°C (-40 to 185°F)           Operating Temperature (package included)         -20 to 85°C (-4 to 185°F)           Ambient Relative Humidity         5 to 95% (non-condensing)           Storage Temperature (package included)         -20 to 85°C (-4 to 185°F)           Ambient Relative Humidity         5 to 95% (non-condensing)           Standards and Certifications         EN           EMC         EN 55032/35           EMI         CISPR 32, FCC Part 15B Class A           EMS         IEC 61000-4-2 ESD: Contact: 4 KV: Air: 8 kV IEC 61000-4-3 RF: 80 MHz to 1 GHz 3 V/m IEC 61000-4-4 EFT: Power: 2 kV: Signal: 1 kV IEC 61000-4-4 EFT: Power: 2 kV: Signal: 3 V/m IEC 61000-4-4 EFT: Power: 2 kV: Signal: 3 V/m IEC 61000-4-4 EFT: Power: 2 kV: Signal: 3 V/m IEC 61000-4-4 SC: 3100 MHz to 3 OHHz 3 V/m; Signal: 3 V/m           Declaration         CP-104N-T: 3, 673,087 hrs CP-104N-T: 2, 189, 472 hrs           Standards         Telcordia (Belicore) Standard TR/SR           Varranty         Sears           Quarting Period         5 years           Details         Sears           Device         1 x CP-104N Series se	Windows Drivers		
Input Current         CP-104N-1: 365 mA @ 3.3 VDC CP-104N-1: 615 mA @ 3.3 VDC           Physical Characteristics         30 x 50.95 mm (1.18 x 2 in)           Dimensions         30 x 50.95 mm (1.18 x 2 in)           Environmental Limits         -           Operating Temperature         -40 to 85°C (-40 to 185°F)           Storage Temperature (package included)         -20 to 85°C (-40 to 185°F)           Ambient Relative Humidity         5 to 95% (non-condensing)           Standards and Certifications         -           EMC         EN 55032/36           EMI         CISPR 32, FCC Part 15B Class A           EMS         LEC 61000-42 ESD: Contact 4 tVA, Air: 8 VV IEC 61000-44 EFF: Power 1 KV Signal: 0.5 VV           Declaration	Linux Drivers	Linux kernel 4.x, Linux kernel 5.x	
CP-104N-I-T: 615 mA @ 3.3 VDC         Physical Characteristics         Dimensions       30 x 50.95 mm (1.18 x 2 in)         Environmental Limits         Operating Temperature       -40 to 85°C (-40 to 185°F)         Storage Temperature (package included)       -20 to 85°C (-40 to 185°F)         Ambient Relative Humidity       5 to 95% (non-condensing)         Standards and Certifications       EMC         EMC       EN 55032/35         EMS       CISPR 32, FCC Part 15B Class A         EMS       EC 61000-4-2 ESD: Contact: 4 My Airs 8 M/ IEC 61000-4-2 ESD: Contact: 4 My Airs 8 M/ IEC 61000-4-3 FRF: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 S Suge SMHz to 1 GHz: 3 V/m IEC 61000-4-4 S Suge SMHz to 1 GHz: 3 V/m IEC 61000-4-4 S Suge SMHz to 1 GHz: 3 V/m IEC 61000-4-4 S Suge SMHz to 1 GHz: 3 V/m IEC 61000-4-4 S Suge SMHz to 1 GHz: 3 V/m IEC 61000-4-4 S Suge SMHz to 1 GHz: 3 V/m IEC 61000-4-4 S Suge SMHz to 1 GHz: 3 V/m IEC 61000-4-4 S Suge SMHz to 1 GHz: 3 V/m IEC 61000-4-4 S Suge SMHz to 1 GHz: 3 V/m IEC 61000-4-4 SUGE SUGE         Declaration       CP-104N-T: 3,673,087 hrs CP-104N-T: 2,189,472 hrs         Standards       Telcordia (Bellcore) Standard TF/SR         Warranty       Sea www.moxa.com/warranty         Varranty       Sea www.moxa.com/warranty         Package Contents       Sea www.moxa.com/warranty         Device       1 x CP-104N Series serial loard         Cable       CP-104N-T: 2 x 20-pin female to 2 DB9 male sera	Power Parameters		
Dimensions         30 x 50.35 mm (1.18 x 2 in)           Environmental Limits         -40 to 85°C (-40 to 185°F)           Storage Temperature (package included)         -20 to 85°C (-4 to 185°F)           Ambient Relative Humidity         5 to 95% (non-condensing)           Standards and Certifications	Input Current		
Environmental Limits           Operating Temperature         -40 to 85°C (-40 to 185°F)           Storage Temperature (package included)         -20 to 85°C (-41 to 185°F)           Ambient Relative Humidity         5 to 95% (non-condensing)           Standards and Certifications         EM           EMC         EN 56032/35           EMI         CISPR 32, FCC Part 15B Class A           EMS         IEC 61000-4-2 ESD: Contact: 4 KY; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 SR: 90 MHz to 1 GHz: 3 V/m           Declaration         IEC 61000-4-4 SR: 90 MHz to 1 GHz: 3 V/m IEC 61000-4-4 SR: 90 MHz to 1 GHz: 3 V/m; Signal: 0.5 kV IEC 61000-4-4 SR: 90 MHz to 1 GHz: 3 V/m; Signal: 3 V/m IEC 61000-4-4 SR: 90 MHz to 1 GHz: 3 V/m; Signal: 3 V/m           Declaration         CP-104N-T: 3,673,087 hrs CP-104H-1: 2, 189,472 hrs           Standards         Telcordia (Bellcore) Standard TR/SR           Warranty         Standard SR: 0 Se www.moxa.com/warranty           Warranty         See www.moxa.com/warranty           Declaratis         See www.moxa.com/warranty           Declaratis         See www.moxa.com/warranty           Warranty Period         5 years           Details         See www.moxa.com/warranty           Declaration         See www.moxa.com/warranty           Grade         See www.moxa.com/warranty	Physical Characteristics		
Operating Temperature       -40 to 85°C (-40 to 185°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         EMC       EN 55032/35         EMI       OISPR 32, FOC Part 15B Class A         EMS       IEC 61000-4-2 ESD: Contact: 4 KY; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-5 Surge: Power: 2 KY; Signal: 0.5 kV IEC 61000-4-6 CS: 150 KHz to 60 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-6 CS: 150 KHz to 60 MHz: 3 V/m; Signal: 3 V/m         Declaration       CP-104N-T: 3,673,087 hrs CP-104NH-T: 2,189,472 hrs         Time       CP-104N-T: 3,673,087 hrs CP-104NH-T: 2,189,472 hrs         Standards       Telcordia (Bellcore) Standard TR/SR         Warranty       Syears         Quark to the field of the serial code serial codes, 25 cm	Dimensions	30 x 50.95 mm (1.18 x 2 in)	
Storage Temperature (package included)       -20 to 85°C (-4 to 185°F)         Ambient Relative Humidity       5 to 95% (non-condensing)         Standards and Certifications       EMC         EMC       EN 55032/35         EMI       CISPR 32, FCC Part 15B Class A         EMS       EC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m         EC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m       EC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m         EC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m       EC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m         EC 61000-4-4 SS: 150 KHz to 80 MHz: 3 V/m       EC 61000-4-4 RS: 150 KHz to 80 MHz: 3 V/m         EC 61000-4-6 RS: 150 KHz to 80 MHz: 3 V/m       EC 61000-4-6 RS: 150 KHz to 80 MHz: 3 V/m         Declaration       CP-104N-T: 3,673,087 hrs         MTBF       CP-104N-T: 3,1673,087 hrs         Time       CP-104N-T: 3,169,472 hrs         Standards       Telcordia (Bellcore) Standard TR/SR         Warranty       See www.moxa.com/warranty         Warranty       See www.moxa.com/warranty         Package Contents       See www.moxa.com/warranty         Device       1 x CP-104N Series serial board         Cable       CP-104N-T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cm	Environmental Limits		
Ambient Relative Humidity       5 to 95% (non-condensing)         Standards and Certifications         EMC       EN 55032/35         EMI       CISPR 32, FCC Part 15B Class A         EMS       IEC 61000-4.2 ESD: Contact: 4 kY; 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 61000-4.4 EFT: Power: 2 kV; Signal: 0.5 kV         Declaration       IEC 61000-4.4 EFT: Power: 2 kV; Signal: 1 kV IEC 61000-4.6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m         Green Product       RoHS, CRoHS, WEEE         MTBF       Image: CP-104N-T: 3,673,087 hrs CP-104N-I-T: 2,189,472 hrs         Standards       Telcordia (Bellcore) Standard TR/SR         Warranty       See www.moxa.com/warranty         Package Contents       See www.moxa.com/warranty         Package Contents       1 x CP-104N T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cm	Operating Temperature	-40 to 85°C (-40 to 185°F)	
Standards and Certifications         EMC       EN 55032/35         EMI       CISPR 32, FCC Part 15B Class A         EMS       IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 FS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 1 kV; Signal: 0.5 kV IEC 61000-4-4 CS: 150 kHz to 1 GHz: 3 V/m; Signal: 3 V/m IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m         Declaration       RoHS, CRoHS, WEEE         MTBF       CP-104N-T: 3,673,087 hrs CP-104N-I-T: 2,189,472 hrs         Standards       Telcordia (Bellcore) Standard TR/SR         Warranty       See www.moxa.com/warranty         Varranty       See www.moxa.com/warranty         Package Contents       1 x CP-104N Series serial board         Device       1 x CP-104N-T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cm	Storage Temperature (package included)	-20 to 85°C (-4 to 185°F)	
EMCEN 55032/35EMICISPR 32, FCC Part 15B Class AEMSIEC 61000-4.2 ESD: Contact: 4 VK: Air: 8 VV IEC 61000-4.3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4.3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4.4 EFT: Power: 2 kV; Signal: 0.5 kV IEC 61000-4.4 EFT: Power: 2 kV; Signal: 0.5 kV IEC 61000-4.4 EFT: Power: 2 kV; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.4 EFT: Power: 2 kV; Signal: 3 V/m IEC 61000-4.4 EFT: Power: 2 kV; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4.5 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100 kHz to 80 MHz to 1 GHz to 80 kHz to 80 k	Ambient Relative Humidity	5 to 95% (non-condensing)	
EMICISPR 32, FCC Part 15B Class AEMSIEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 ESF: 90 WHz to 1 GHz: 3 V/m IEC 61000-4-4 ESF: Power: 1 kV; Signal: 0.5 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 1 kV IEC 6100-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 1 kV IEC 6100 KHZ: 3 CONTANTDeclarationCP-104N-T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cmDetailsCP-104N-T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cm	Standards and Certifications		
EMSIEC 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 61000-4-6 S Surge: Power: 2 kV; Signal: 1 kV IEC 61000-4-6 S Surge: Power: 2 kV; Signal: 3 V/m IEC 61000-4-6 S Surge: Power: 2 kV; Signal: 3 V/m IEC 61000-4-6 S Surge: Power: 2 kV; Signal: 3 V/m IEC 61000-4-6 S Surge: Power: 2 kV; Signal: 3 V/m IEC 61000-4-6 S Surge: Power: 2 kV; Signal: 3 V/m IEC 61000-4-6 S Surge: Power: 2 kV; Signal: 3 V/m IEC 61000-4-6 S FMFDeclarationRoHS, CRoHS, WEEEMTBFPower CP-104N-T: 3,673,087 hrs CP-104N-I-: 2,189,472 hrsStandardsTelcordia (Bellcore) Standard TR/SRWarrantySee www.moxa.com/warrantyWarrantySee www.moxa.com/warrantyPackage ContentsSee www.moxa.com/warrantyDevice1 x CP-104N Series serial boardCableCP-104N-T: 2, 20-pin female to 2 DB9 male serial cables, 25 cm	EMC	EN 55032/35	
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, Signal: 1 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-8 PFMFDeclarationRoHS, CRoHS, WEEEMTBFCP-104N-T: 3,673,087 hrs CP-104N-T: 2,189,472 hrsStandardsTelcordia (Bellcore) Standard TR/SRWarrantySea www.moxa.com/warrantyWarranty Period5 yearsDetailsSee www.moxa.com/warrantyPackage ContentsCP-104N-T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cm	EMI	CISPR 32, FCC Part 15B Class A	
Green Product       RoHS, CRoHS, WEEE         MTBF         Time       CP-104N-T: 3,673,087 hrs CP-104N-I-T: 2,189,472 hrs         Standards       Telcordia (Bellcore) Standard TR/SR         Warranty       Telcordia (Bellcore) Standard TR/SR         Warranty Period       5 years         Details       See www.moxa.com/warranty         Package Contents       1 x CP-104N Series serial board         Cable       CP-104N-T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cm	EMS	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; Signal: 1 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m	
MTBF       Time     CP-104N-T: 3,673,087 hrs CP-104N-I-T: 2,189,472 hrs       Standards     Telcordia (Bellcore) Standard TR/SR       Warranty     Varranty       Warranty Period     5 years       Details     See www.moxa.com/warranty       Package Contents     1 x CP-104N Series serial board       Cable     CP-104N-T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cm	Declaration		
TimeCP-104N-T: 3,673,087 hrs CP-104N-I-T: 2,189,472 hrsStandardsTelcordia (Bellcore) Standard TR/SRWarrantyYurrantyWarranty Period5 yearsDetailsSee www.moxa.com/warrantyPackage Contents1 x CP-104N Series serial boardCableCP-104N-T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cm	Green Product	RoHS, CRoHS, WEEE	
CP-104N-I-T: 2,189,472 hrs         Standards       Telcordia (Bellcore) Standard TR/SR         Warranty         Warranty Period       5 years         Details       See www.moxa.com/warranty         Package Contents       1 x CP-104N Series serial board         Cable       CP-104N-T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cm	MTBF		
Warranty       Warranty Period     5 years       Details     See www.moxa.com/warranty       Package Contents     1 x CP-104N Series serial board       Cable     CP-104N-T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cm	Time		
Warranty Period5 yearsDetailsSee www.moxa.com/warrantyPackage Contents1 x CP-104N Series serial boardDevice1 x CP-104N-T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cm	Standards	Telcordia (Bellcore) Standard TR/SR	
Details     See www.moxa.com/warranty       Package Contents     I x CP-104N Series serial board       Device     1 x CP-104N Series serial board       Cable     CP-104N-T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cm	Warranty		
Package Contents         Device       1 x CP-104N Series serial board         Cable       CP-104N-T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cm	Warranty Period	5 years	
Device     1 x CP-104N Series serial board       Cable     CP-104N-T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cm	Details	See www.moxa.com/warranty	
Cable CP-104N-T: 2 x 20-pin female to 2 DB9 male serial cables, 25 cm	Package Contents		
	Device	1 x CP-104N Series serial board	
	Cable		



Installation K	t
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Documentation

Door/CP-100N Port12, Door/CP-100N Port34

**CP-104N-I-T** 

1 x quick installation guide 1 x warranty card

# **Dimensions**

### **CP-104N-T**

Unit: mm







## **Ordering Information**

Model Name	Serial Standards	No. of Serial Ports	Serial Isolation Protection
CP-104N-T	RS-232	4	-
CP-104N-I-T	RS-232	4	2.5 kV

# **Accessories (sold separately)**

#### Connectors

Mini DB9F-to-TB	DB9 female to terminal block connector
Cables	
CBL-M9x2HSF2x10H-15	20-pin female to 2 DB9 male serial cables, 15 cm Applicable Models: CP-104N-T
CBL-HSF2x10-15	20-pin female to 20-pin female serial cable, 15 cm Applicable Models: CP-104N-I-T

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