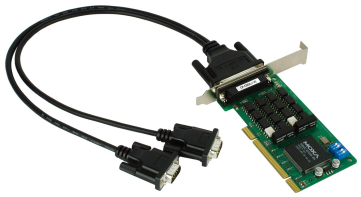
CP-132UL Series

2-port RS-422/485 Universal PCI serial boards with optional 2 kV isolation



Features and Benefits

- Over 800 kbps data throughput for top performance
- 921.6 kbps maximum baudrate for fast data transmission
- ADDC provides automatic data direction control for RS-485 signals
- Transmit data up to 1.2 km with RS-422/485
- 128-byte FIFO and on-chip S/W flow control
- Compatible with 3.3/5 V PCI and PCI-X
- Drivers provided for a broad selection of operating systems, including Windows, Linux, and UNIX
- MD1 low-profile form factor fits small-sized PCs
- Wide-temperature model available for -40 to 85°C environments

Certifications

Introduction

The CP-132UL and CP-132UL-I are 2-port Universal PCI boards designed for industrial automation applications that require a long-distance, multipoint, PC-based data acquisition solution.

On-Chip Automatic Data Direction Control for Precise RS-485 Communication

RS-485 communication requires precise timing control to enable and disable the line driver. Our Turbo Serial Engine™ chip that powers the CP-132UL/UL-I boards comes with on-chip ADDC®, which makes RS-485 as easy to use as RS-232.

RS-485 Multidrop for up to 31 Devices Within 1.2 km

The CP-132UL/UL-I Universal PCI boards have two RS-422/485 serial ports, both of which can achieve data rates of up to 921.6 kbps. In RS-485 mode, the boards can connect up to 31 daisy-chained RS-485 devices within a range of 1.2 km. For long-distance RS-485 communication, choose the CP-132UL-I model, which comes with 2 kV electrical isolation protection to prevent equipment damage.

Top Serial Performance

With over 30 years of experience in serial board design, we have perfected the design of our high-performance serial data transmission chip. The Turbo Serial Engine™ chip provides serial boards with a 128-byte FIFO, on-chip software flow control, and burst data mode. Thanks to the Turbo Serial Engine™, we are able to offer smart serial boards with exceptional performance.

Drivers Provided for Windows, Linux, and UNIX

We continue to support a wide variety of operating systems, and the CP-132UL/UL-I boards are no exception. Reliable Windows, Linux, and UNIX drivers are provided for all of Moxa's boards, and other operating systems, such as WEPOS, are also supported for embedded integration.

Specifications

Serial Interface

Comm. Controller	MU860 (16C550C compatible)
Bus	32-bit Universal PCI
Connector	DB25 female
FIFO	128 bytes
Max. No. of Boards per PC	4

No. of Ports	2
Serial Standards	RS-422 RS-485
Bitrate	50 bps to 921.6 kbps
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None Even Odd Space Mark
Flow Control	None XON/XOFF
Isolation	CP-132UL-I-DB9M: 2 kV CP-132UL-I-T: 2 kV

Serial Signals

RS-422	Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND
RS-485-2w	Data+, Data-, GND

Serial Software Features

Windows Drivers	Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8/8.1/10/11 (x86/x64), Windows 2008 R2/2012/2012 R2/2016/2019 (x64)/2022, Windows Embedded CE 5.0/6.0, Windows XP Embedded
Linux Drivers	Linux kernel 5.x Linux kernel 4.x Linux kernel 3.x Linux kernel 2.6.x
UNIX Drivers	QNX 6, SCO OpenServer, UnixWare 7, Solaris 10, FreeBSD
Arm®-based Platform Support	Linux kernel 5.x/4.x

Power Parameters

Input Current	CP-132UL-DB9M: 120 mA @ 5 VDC CP-132UL-T: 120 mA @ 5 VDC CP-132UL-I-DB9M: 490 mA @ 5 VDC CP-132UL-I-T: 490 mA @ 5 VDC

Physical Characteristics

Dimensions	64.4 x 120 mm (2.53 x 4.72 in)

LED Interface

LED Indicators	Built-in Tx, Rx LEDs for each port

Environmental Limits

Operating Temperature	CP-132UL-DB9M: 0 to 55°C (32 to 131°F) CP-132UL-T: -40 to 85°C (-40 to 185°F) CP-132UL-I-DB9M: 0 to 55°C (32 to 131°F) CP-132UL-I-T: -40 to 85°C (-40 to 185°F)
Storage Temperature (package included)	-40 to 85°C (-40 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

Declaration

Green Product	RoHS, CRoHS, WEEE

MTBF

Time	1,647,832 hrs
Standards	Telcordia Standard SR-332

Warranty

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

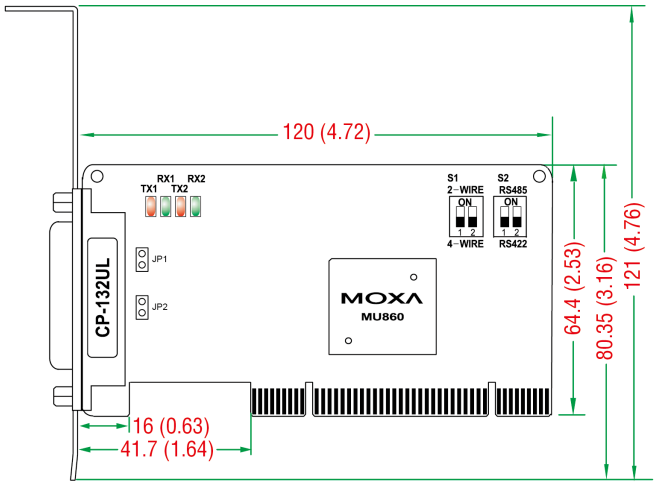
Package Contents

Device	1 x CP-132UL Series serial board
Cable	CP-132UL-I-DB9M: 1 x CBL-M25M9x2-50 CP-132UL-DB9M: 1 x CBL-M25M9x2-50
Documentation	1 x quick installation guide 1 x substance disclosure table 1 x warranty card

Dimensions

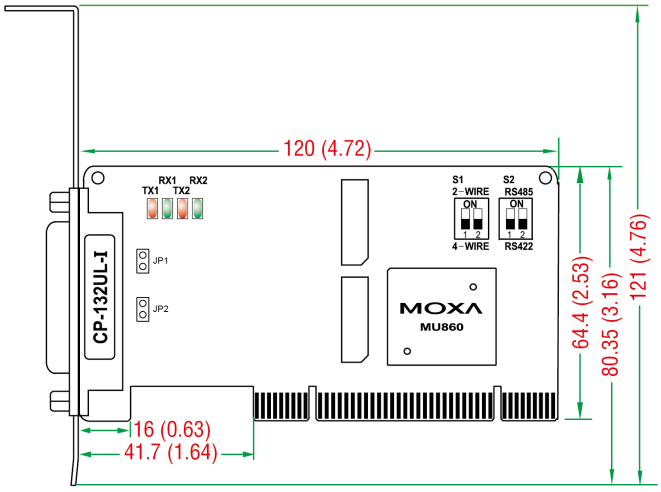
CP-132UL

Unit: mm (inch)



CP-132UL-I

Unit: mm (inch)



Ordering Information

Model Name	Serial Standards	No. of Serial Ports	Serial Isolation Protection	Operating Temp.	Included Cable
CP-132UL-DB9M	RS-422/485	2	–	0 to 55°C	CBL-M25M9x2-50
CP-132UL-T	RS-422/485	2	–	-40 to 85°C	–

Model Name	Serial Standards	No. of Serial Ports	Serial Isolation Protection	Operating Temp.	Included Cable
CP-132UL-I-DB9M	RS-422/485	2	2 kV	0 to 55°C	CBL-M25M9x2-50
CP-132UL-I-T	RS-422/485	2	2 kV	-40 to 85°C	–

Accessories (sold separately)

Cables

CBL-M25M9x2-50	M25 to 2 x DB9 male serial cable, 50 cm

Connectors

Mini DB9F-to-TB	DB9 female to terminal block connector

© Moxa Inc. All rights reserved. Updated Oct 30, 2026.

This document and any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of Moxa Inc. Product specifications subject to change without notice. Visit our website for the most up-to-date product information.