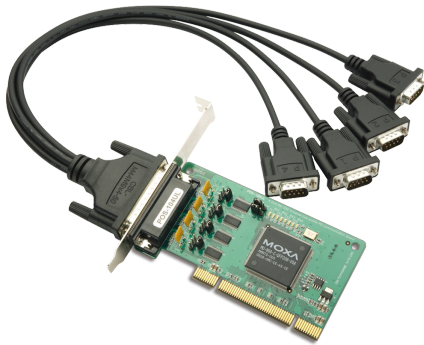


# POS-104UL

## 4-port RS-232 Universal PCI boards with power over serial



- > Over 800 kbps data throughput, for top performance
- > Power options for each port: 5 V (output), 12 V (output), and RI (input)
- > Serial port power from bus or power supply
- > 921.6 kbps maximum baudrate for super fast data transmission
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Compatible with 3.3/5 V PCI and PCI-X
- > Low profile board, suitable for compact-sized PCs
- > Drivers provided for a broad selection of operating systems, including the latest Windows and Linux
- > Wide temperature model available for -40 to 85°C environments



### : Introduction

The POS-104UL is a smart, 4-port Universal PCI serial board designed for POS and ATM applications and for use by industrial automation system manufacturers and system integrators. The POS-104UL is compatible with all major operating systems. In addition, each of the 4

RS-232 serial ports supports data rates up to 921.6 kbps and provides full modem control signals to ensure compatibility with a wide range of serial peripherals. The POS-104UL supplies 5 or 12 volts of power to each serial port, and it works with both 3.3 V and 5 V PCI buses, making it suitable for installation in most PC servers.

### : Specifications

#### Hardware

**Comm. Controller:** MU860 (16C550C compatible)

**Bus:** 32-bit Universal PCI

**Connector:** DB44 female

#### Serial Interface

**Number of Ports:** 4

**Serial Standards:** RS-232

**Max. No. of Boards per PC:** 8

#### Performance

**Baudrate:** 50 bps to 921.6 kbps (supports non-standard baudrates)

#### 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, RI (optional)

#### Physical Characteristics

**Dimensions:** 64.4 x 120 mm (2.53 x 4.72 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, Windows Embedded CE 5.0/6.0, Windows XP Embedded

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

**Unix-like Systems:** QNX 6, SCO OpenServer, UnixWare 7, Solaris 10, FreeBSD

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

#### 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)

#### Standards and Certifications

**EMC:** EN 61000-6-2/6-4

**EMI:** CISPR 22, 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: 10 V/m

IEC 61000-4-4 EFT: Power: 2 kV; Signal: 1 kV

IEC 61000-4-5 Surge: Power: 2 kV

IEC 61000-4-6 CS: 150 kHz to 80 MHz: 10 V/m; Signal: 10 V/m

IEC 61000-4-8 PFMF

IEC 61000-4-11

#### MTBF (mean time between failures)

**Time:** 2,124,022 hrs

**Standard:** Telcordia (Bellcore) TR/SR

#### Power Requirements

**Input Current:** 145 mA @ 5 VDC

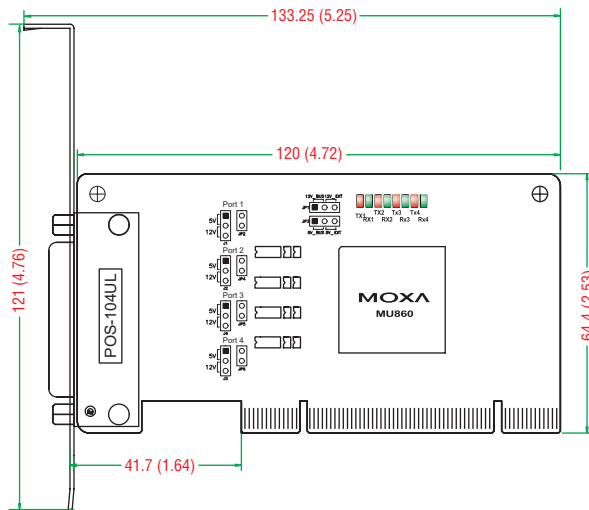
#### Warranty

**Warranty Period:** 5 years

**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

### Dimensions

Unit: mm (inch)



### Ordering Information

#### Available Models

**POS-104UL-DB9M:** 4-port RS-232 low profile Universal PCI board with serial port power, 0 to 55°C operating temperature (CBL-M44M9x4-50 (POS) cable included)

**POS-104UL-T:** 4-port RS-232 low profile Universal PCI board with serial port power, -40 to 85°C operating temperature

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

**CBL-M44M9x4-50 (POS):** M44 to 4 x DB9-M cable, 50 cm

**Low Profile Bracket:** Bracket for DB44 connector (1490000001000)

#### Package Checklist

- 1 POS-104UL board
- Low profile bracket
- 1 connection cable (optional)
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

#### CBL-M44M9x4-50 (POS)



PIN	RS-232
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	5V/12V/RI

#### DB9 male

