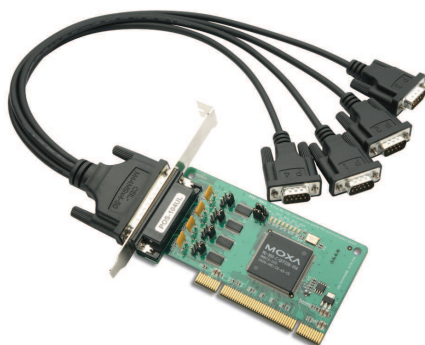


# POS-104UL

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



- > Over 800 Kbps data throughput, for top performance
- > Power options for each port: 5V (output), 12V (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 3.3/5V PCI and PCI-X
- > Low profile board, suitable for compact-sized PCs
- > Drivers provided for Windows (7 x86/x64, XP/2003/Vista/2008 x86/x64, 2000, 9X/ME/NT), Windows XP Embedded, Windows CE 5.0/6.0, DOS, Linux 2.4, Linux 2.6 (x86/x64), FreeBSD 4/5, QNX 6, SCO OpenServer 5/6, and UnixWare 7
- > 15 KV ESD protection on the board
- > 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 works with both 3.3V and 5V 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:** 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  
**Flow Control:** RTS/CTS, XON/XOFF  
**I/O Address:** Assigned by BIOS  
**IRQ:** Assigned by BIOS

#### Serial Signals

**RS-232:** Tx/D, Rx/D, RTS, CTS, DTR, DSR, DCD, GND, RI (optional)

#### Driver Support

**Operating Systems:** Windows 9X/ME/NT/2000, Windows XP/2003/Vista/2008/7 x86/x64, Windows XP Embedded, Windows CE 5.0/6.0, DOS, Linux 2.4, Linux 2.6 x86/x64, FreeBSD 4/5, QNX 6, SCO OpenServer 5/6, UnixWare 7

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

#### Physical Characteristics

**Dimensions:** 64.4 x 120 mm (2.53 x 4.72 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)

#### Standards and Certifications

**EMC:** CE, FCC

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

**EMS:** EN 61000-6-2, EN 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:** 2,124,022 hrs

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

#### Power Requirements

**Power Consumption:** 145 mA @ +5 V

**Power Output** (per port): 1 A @ 5 V, 1 A @ 12 V

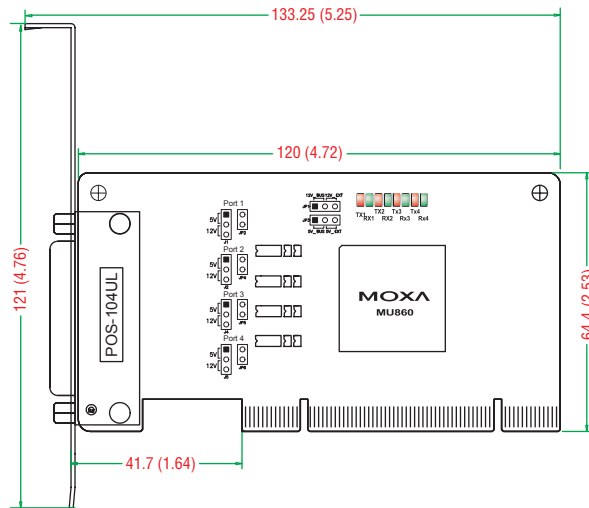
#### Warranty

**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 (DB9 male cable included)

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

### Package Checklist

- 1 POS-104UL board
- Low profile bracket
- DB9 male cable (POS-104UL-DB9 only)
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

### Connection Options (can be purchased separately)

#### 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

