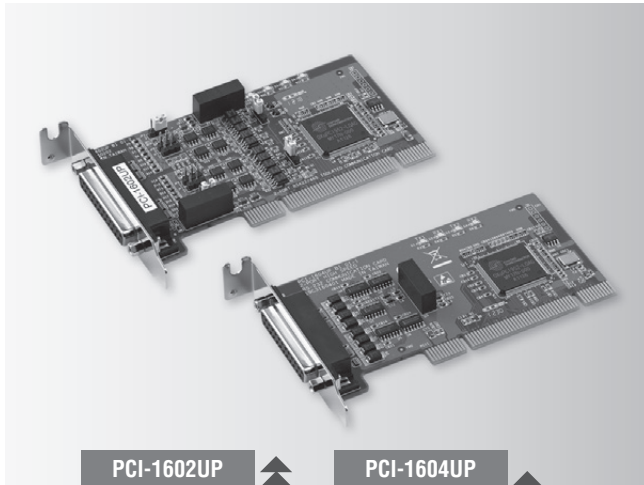# PCI-1602UP

2-port RS-422/485 Low-Profile Universal PCI Communication Card with Isolation Protection

PCI-1604UP

2-port RS-232 Low-Profile Universal PCI Communication Card with Isolation Protection

PCI-1602UP   PCI-1604UP

Features

- PCI bus 2.2 compliant
- Speeds up to 921.6 kbps
- 2-port RS-422/485 (PCI-1602UP); 2-port RS-232 (PCI-1604UP)
- I/O address automatically assigned by PCI Plug & Play
- OS support: Windows 2000/XP/Vista/7, Windows CE 5.0/6.0, Linux
- 2,500 V_{DC} EFT Protection
- 2,500 V_{DC} Isolation protection for RS-422/485 (PCI-1602UP) or RS-232 (PCI-1604UP)
- Interrupt status register for increased performance
- Space reserved for termination resistors (PCI-1602UP)
- Automatic RS-485 data flow control (PCI-1602UP)
- Powerful and easy-to-use utility (ICOM Tools)
- Universal and low-profile PCI (Supports 3.3 V or 5 V PCI bus signal)

Introduction

These RS-232/422/485 PCI communication cards are compatible with the PCI 2.2 bus specification for universal connectivity and low-profile PCI cards. The PCI-1604UP provides two independent RS-232 ports, while the PCI-1602UP has two RS-422/485 ports. To improve system performance, all cards allow transmission rates up to 921.6 kbps. To increase reliability, the cards offer EFT protection, protecting your system from abrupt high voltages up to 2,500 V_{DC}. High-performance OXuPC1952 and OXuPC1954 UARTs with 128-byte FIFO, reduces the CPU load, making the cards especially suitable for multitasking environments.

The cards follow the Low Profile PCI MD1 standard. This standard has the same protocol and electronic definition as standard PCI, but the low-profile PCI standard is smaller. Thus, the cards are suitable for embedded systems, and size-constrained environments. Moreover, all cards are equipped with an universal PCI connector, which allows support for traditional systems with 5 V signaling or newer systems with 3.3 V signaling.

Specifications

General

- **Bus Type** — Universal PCI V 2.2
- **Certifications** — CE, FCC class A
- **Connectors** — 1 x Female DB25
- **Dimensions (L x W)** — 119.91 x 64.41 mm (4.7" x 2.5") (low-profile MD1)
- **Power Consumption** — 5 V @ 400 mA (Max.)

Communications

- **Communication Controller** — OXuPC1952
- **Data Bits** — 5, 6, 7, 8
- **Data Signals** — RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND
  RS-422: Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS-, GND
  RS-485: Data+, Data-, GND
- **FIFO** — 128 bytes
- **Flow Control** — CTS/RTS, Xon/Xoff
- **IRQ** — Assigned by Plug & Play
- **Parity** — None, Even, Odd, Mark and Space
- **Speed** — 50 bps ~ 921.6 kbps
- **Stop Bits** — 1, 1.5, 2

Protection

- **ESD Protection** — 15 KV
- **Isolation Protection** — 2,500 V_{DC}
- **EFT Protection** — 2,000 V_{DC}

Software

- **Bundled Software** — ICOM Tools
- **OS Support** — Windows 2000/XP/Vista/7, Windows CE 5.0/6.0, Linux, and QNX

Environment

- **Operating Humidity** — 5 ~ 95 % RH, non-condensing (refer to IEC 68-2-3)
- **Operating Temperature** — 0 ~ 65°C (refer to IEC 68-2-1, 2) (32 ~ 149°F)
- **Storage Temperature** — -25 ~ 85°C (-13 ~ 185°F)

Ordering Information

- **PCI-1602UP** — 2-port RS-422/485 Low-Profile Uni PCI Comm Card w/Iso
- **PCI-1604UP** — 2-port RS-232 Low-Profile Uni PCI Comm Card w/Iso

Note: PCI-1602UP and PCI-1604UP include one DB25 to 2 x DB9 cable