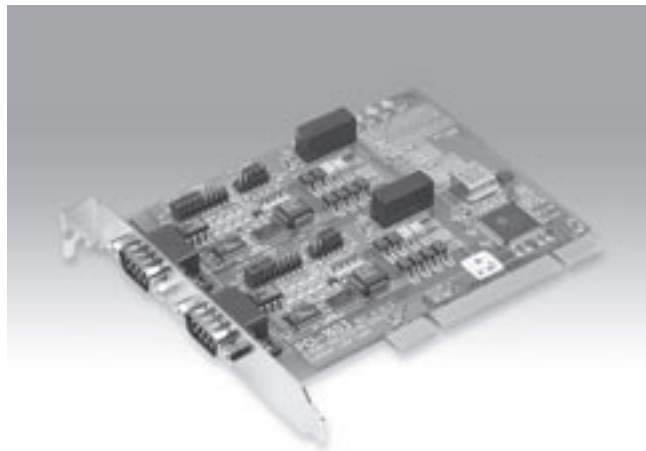# PCI-1603

2-port Isolated RS-232/Current-loop PCI Communication Card

Features

- Two independent RS-232 or Current-loop serial ports
- Each port can be individually configured to RS-232 or current-loop
- 16PCI952 FIFO UART (128-byte FIFO)
- PCI bus specification 2.2 compliant
- Speeds:
  RS-232: 50 bps ~ 230.4 kbps
  Current-loop: 57.6 kbps
- I/O address automatically assigned by PCI Plug & Play
- OS supported: Windows® 98/ME/2000/XP/XP Embedded, Linux
- Interrupt status register for increased performance
- Powerful and easy-to use utility (ICOM Tools)
- Universal PCI (Supports 3.3 V or 5 V PCI bus signal)

FCC CE

Introduction

PCI-1603 offers a versatile range of high-speed interfacing options. You can switch its ports between the popular RS-232 or noise-resistant current-loop. The card utilizes 16PCI952 UARTs with 128-byte FIFO buffer for faster and more reliable communication, especially under multi-tasking environments such as Windows operating systems.

PCI-1603 provides two isolated RS-232 or current-loop serial ports. You can configure each port individually to RS-232 or current-loop using onboard jumpers.

The card utilizes 16PCI952 UART that buffers data into packets before sending it to the bus. This drastically reduces CPU load and avoids data loss when the system is busy and cannot process an interrupt quickly. These FIFO buffers make the PCI-1603 especially suitable for high speed serial I/O under Windows.

Onboard optical isolators protect your PC and equipment against damage from ground loops, increasing system reliability in harsh environments.

Specifications

General

- **Bus Type** Universal PCI V 2.2
- **Certifications** CE, FCC class A
- **Connectors** 2 x DB9-M
- **Dimensions** 123 x 92 mm (4.8" x 3.6")
- **Power Consumption** +5 V (250 ~ 300 mA)

Current-loop Interface

- **Baud-rate** 50 ~ 57600 bps
- **Current Value** 20 mA (Standard)
- **Mode** Asynchronous, full duplex
- **Signal Driver/receiver** 6N136
- **Signals** TxD+, TxD-, RxD+, RxD-
- **Transmission Distance** 1000 m

Communications

- **Communication Controller** 16PCI952
- **Data Bits** 5, 6, 7, 8
- **Data Signals** RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI,GND
  Current Loop: Tx+, Tx-, Rx+, Rx-
- **FIFO** 128 bytes
- **Flow Control** RTS/CTS, Xon/Xoff
- **IRQ** Assigned by Plug & Play
- **Parity** None, even, odd
- **Speed** RS-232: 50 bps ~ 230.4 kbps
  Current Loop: 50 bps ~57.6 kbps
- **Stop Bits** 1, 1.5, 2

Software

- **Bundled Software** ICOM Tools
- **Driver Support** Windows 98/ME/2000/XP/XP embedded, Linux

Protection

- **ESD Protection** 16 kV
- **Isolation Protection** 3,000 V_{DC} for RS-232 and current-loop

Environment

- **Humidity (Operating)** 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-1603** 2-port Isolated RS-232/current-loop PCI Comm. Card