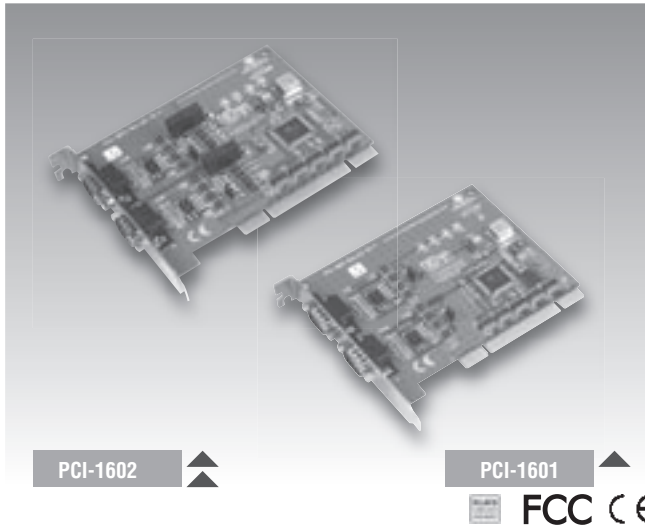


PCI-1601 PCI-1602

2-port RS-422/485 PCI Communication Card

2-port RS-422/485 PCI Communication Card, w/Isolation Protection



Features

- PCI bus specification 2.2 compliant
- Speeds up to 921.6 kbps
- 2-port RS-422/485 interface
- I/O address automatically assigned by PCI Plug & Play
- OS support: Windows® 98/ME/2000/XP/XP Embedded, Linux
- Optional EFT Surge protection
- Optional isolation protection for RS-422/485
- Interrupt status register for increased performance
- Space reserved for termination resistors
- Automatic RS-485 data flow control
- Powerful and easy-to use utility (ICOM Tools)

Introduction

PCI-1601 and PCI-1602 are 2 port RS-422/485 PCI communication cards that are compatible with the PCI 2.1 bus specification. Both cards provide two optional isolated and EFT surge protected RS-422/485 ports, and comes with features such as: high transmission speed of 921.6 kbps, optional EFT Surge & isolation protection, windows utility software and more. The cards also come with high-performance 16PCI952 UART with a 128-byte FIFO to reduce CPU load. This makes the PCI-1601 and PCI-1602 especially suitable for multitasking environments.

PCI-1602 is available with 3,000 V_{DC} optical isolation to protect your PC and equipment against damages from ground loops in harsh environments. To further increase reliability, both boards has EFT surge protection technology, protecting your system from abrupt high voltages up to 2,500 V_{DC} (PCI-1601B and PCI-1602B). Besides, Advantech also provides a convenient utility program called ICOM Tools, to help test the PCI card performance by analyzing the port status. Controlled by easy-to-use menu commands and toolbar buttons, ICOM Tools acts as a PC-based data scope that lets you set a trigger condition, capture the communications data and monitors the signal status. In addition, ICOM Tools is applicable to all series of Advantech ICOM cards.

Specifications

General

| | | |
|----------------------------|---------------------------|---------------|
| ▪ Bus Type | 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 | Typical | Max |
| PCI-1601 | 220 mA (+5 V) | 270 mA (+5 V) |
| PCI-1602 | 250 mA (+5 V) | 300 mA (+5 V) |

Communications

| | |
|------------------------------------|---|
| ▪ Communications Controller | 16PCI952 |
| ▪ Data Bits | 5, 6, 7, 8 |
| ▪ Data Signals | Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS-, GND (RS-422) Data+, Data-, GND (RS-485) |
| ▪ FIFO | 128 bytes |
| ▪ Flow Control | RTS/CTS. Xon/Xoff |
| ▪ IRQ | Assigned by Plug & Play |
| ▪ Parity | None, even, odd |
| ▪ Speed | 50 bps ~ 921.6 kbps |
| ▪ Stop Bits | 1, 1.5, 2 |

Protection

| | |
|-------------------------------|--|
| ▪ ESD Protection | 16 kV |
| ▪ Isolation Protection | 3,000 V _{DC} (PCI-1602A/B only) |
| ▪ EFT Surge Protection | 2,500 V _{DC} (PCI-1601B/PCI-1602B only) |

Software

| | |
|---------------------------|--|
| ▪ Bundled Software | ICOM Tools |
| ▪ Driver Support | Windows 98/ME/2000/XP/XP Embedded, Linux |

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-1601A | 2-port RS-422/485 PCI COMM Card |
| ▪ PCI-1601B | 2-port RS-422/485 PCI COMM Card, w/EFT Surge Protection |
| ▪ PCI-1602A | 2-port RS-422/485 PCI COMM Card, w/Isolation Protection |
| ▪ PCI-1602B | 2-port RS-422/485 PCI COMM Card, w/Isolation and EFT Surge Protection |