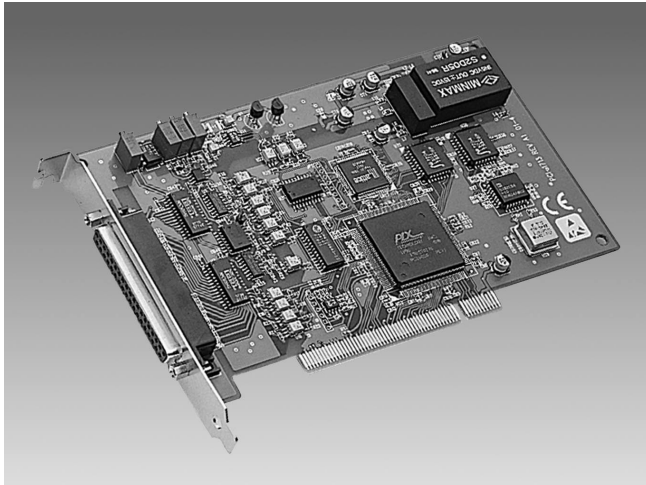


# PCI-1713

100 KS/s, 12-bit, 32-ch,  
Isolated Analog Input Card



CE

## Features

- 2500 V<sub>DC</sub> isolation protection
- 32 single-ended or 16 differential analog inputs, or a combination
- 12-bit resolution for A/D conversion
- Up to 100 KS/s sampling rate for A/D conversion
- Programmable gain for each input channel
- Onboard 4 K samples FIFO buffer
- S/W, internal or external pacer triggering supported

## Introduction

The PCI-1713 is an isolated high-speed analog input card for the PCI bus. It provides 32 analog input channels with a sampling rate up to 100 KS/s, 12-bit resolution and isolation protection of 2500 V<sub>DC</sub>.

## Specifications

### Analog Input

- **Channels** 32 single-ended or 16 differential (software programmable)
- **Resolution** 12-bit
- **Onboard FIFO** 4K samples
- **Conversion Time** 2.5 ms
- **Input Range** Bipolar:  $\pm 10$  V,  $\pm 5$  V,  $\pm 2.5$  V,  $\pm 1.25$  V,  $\pm 0.625$  V (software programmable)  
Unipolar: 0 ~ 10 V, 0 ~ 5 V, 0 ~ 2.5 V, 0 ~ 1.25 V
- **Maximum Input Overvoltage**  $\pm 30$  V
- **Common Mode Rejection Ratio(CMRR)**

Gain	CMRR
0.5, 1	75dB
2	80dB
4	84dB
8	84dB
- **Maximum Sampling Rate** 100 KS/s
- **Accuracy** (depends on gain)

Gain	Accuracy
0.5, 1	0.01% of FSR $\pm$ 1LSB
2	0.02% of FSR $\pm$ 1LSB
4	0.02% of FSR $\pm$ 1LSB
8	0.04% of FSR $\pm$ 1LSB
- **Linearity Error**  $\pm 1$  LSB
- **Input Impedance** 1 G $\Omega$
- **Trigger Mode** Software, on-board programmable pacer or external (TTL level)

### Programmable Pacer

- **Timer** 32-bit programmable timer
- **Time Base** 10 MHz

### General

- **I/O Connector** 37-pin D-type female connector
- **Dimensions (L x H)** 175 x 100 mm (6.9" x 3.9")
- **Power Consumption** +5 V @ 850 mA (Typical), +5 V @ 1.0 A (Max.)
- **Operating Temperature** 0 ~ 60° C (32 ~ 140° F) (refer to IEC 68-2-1, 2)
- **Storage Temperature** -20 ~ 70° C (-4 ~ 158° F)
- **Operating Humidity** 5 ~ 95% RH non-condensing (refer to IEC 68-2-3)

## Ordering Information

- **PCI-1713** 100 KS/s, 12-bit, 32-channel Isolated Analog Input Card, user's manual and driver CD-ROM. (cable not included)
- **PCLD-881B** Industrial Wiring Terminal Board (cable not included)
- **ADAM-3937** Wiring Terminal Board
- **PCL-10137-1** DB-37 cable assembly, 1 m
- **PCL-10137-2** DB-37 cable assembly, 2 m
- **PCL-10137-3** DB-37 cable assembly, 3 m

## Applications

- Signal isolation
- Process monitoring and control
- Transducer/sensor interfacing
- Multi-channel DC voltage measurement