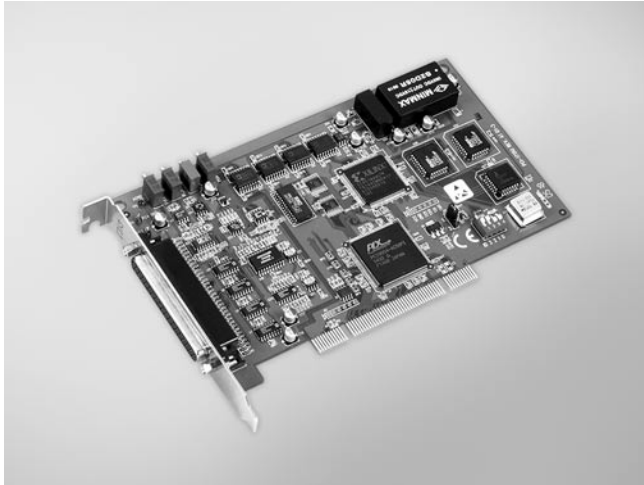


# PCI-1715U

500 kS/s, 12-bit, 32-ch Isolated Analog Input Universal PCI Card



## Features

- 2,500 V<sub>DC</sub> isolation protection
- 32-ch single-ended or 16-ch differential or a combination of analog input
- 12-bit resolution for A/D conversion
- Up to 500 kS/s sampling rate for A/D conversion
- Programmable gain for each input channel
- Onboard 1,024 samples FIFO buffer
- S/W, internal or external pacer sampling modes supported
- Universal PCI Bus
- BoardID™ switch

## Introduction

The PCI-1715U is an isolated high-speed analog input card for the PCI bus. It provides 32 analog input channels with a sampling rate up to 500 kS/s, 12-bit resolution and isolation protection of 2,500 V<sub>DC</sub>.

## Specifications

### Analog Input

- **Channels** 32 single-ended/16 differential (software programmable)
- **Resolution** 12 bits
- **Max. Sampling Rate** 500 kS/s
- **FIFO Size** 1,024 samples
- **Overvoltage Protection** 30 V<sub>p-p</sub>
- **Isolation Protection** 2,500 V<sub>DC</sub>
- **Input Impedance** 1 GΩ
- **Sampling Modes** Software, onboard programmable pacer and external (TTL level)
- **Input Range** (V, software programmable)

<b>Unipolar</b>	N/A	0 ~ 10	0 ~ 5	0 ~ 2.5	0 ~ 1.25
<b>Bipolar</b>	±10	±5	±2.5	±1.25	±0.625
<b>Accuracy (% of FSR ±1LSB)</b>	0.1	0.1	0.2	0.2	0.4

### General

- **Bus Type** Universal PCI V2.2
- **I/O Connector** 1 x DB37 female connector
- **Dimensions (L x H)** 175 x 100 mm (6.9" x 3.9")
- **Power Consumption** Typical: +5 V @ 850 mA  
Max: +5 V @ 1.0 A
- **Operating Temperature** 0 ~ 60° C (32 ~ 140° F) (refer to IEC 68-2-1, 2)
- **Storage Temperature** -20 ~ 70° C (-4 ~ 158° F)
- **Storage Humidity** 5 ~ 95% RH non-condensing (refer to IEC 68-2-3)

## Ordering Information

- **PCI-1715U** 500 kS/s 12-bit, 32-ch Isolated AI PCI Card
- **PCLD-881B** Wiring Board for PCI-1713, PCI-1715U & PCL-813B
- **ADAM-3937** DB37 DIN-rail Wiring Board
- **PCL-10137-1** DB37 Cable, 1 m
- **PCL-10137-2** DB37 Cable, 2 m
- **PCL-10137-3** DB37 Cable, 3 m

## Pin Assignments

AI0	1	20	AI1
AI2	2	21	AI3
AI4	3	22	AI5
AI6	4	23	AI7
AI8	5	24	AI9
AI10	6	25	AI11
AI12	7	26	AI13
AI14	8	27	AI15
GND	9	28	CND
GND	10	29	GND
AI16	11	30	AI17
AI18	12	31	AI19
AI20	13	32	AI21
AI22	14	33	AI23
AI24	15	34	AI25
AI26	16	35	AI27
AI28	17	36	AI29
AI30	18	37	AI31
EXT TRG	19		