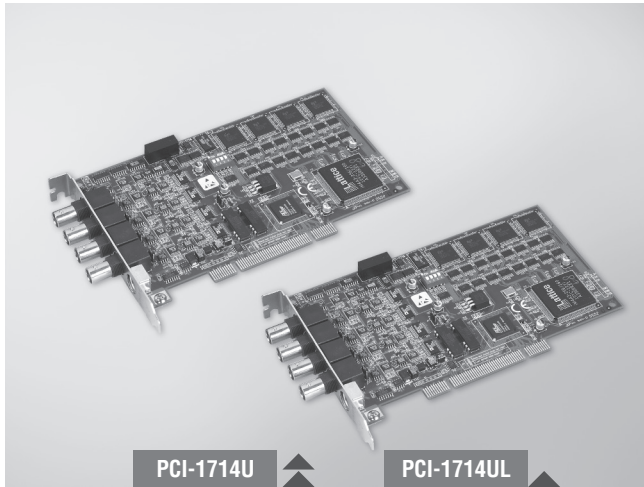


# PCI-1714U PCI-1714UL

**30 MS/s, 12-bit, Simultaneous  
4-ch Analog Input Universal PCI Card**

**10 MS/s, 12-bit, Simultaneous  
4-ch Analog Input Universal PCI Card**



PCI-1714U

PCI-1714UL



## Features

- 4 single-ended analog input channels
- 12-bit A/D converter, with up to 30 MHz sampling rate
- Programmable gain
- Onboard FIFO memory (PCI-1714U: 32,768 samples each channel; PCI-1714UL: 8,192 samples, each channel)
- 4 A/D converters simultaneously sampling
- Multiple A/D triggering modes
- Programmable pacer/counter
- BoardID™ switch
- Universal PCI Bus (supports 3.3 V or 5 V PCI bus signals)

## Introduction

PCI-1714U and PCI-1714UL are advanced high-performance data acquisition cards based on the PCI bus. With a large FIFO of 32,768 for each channel, the maximum sampling rate of PCI-1714U can get up to 30 MS/s, on each channel, with an emphasis on continuous, non-stop, high-speed, streaming data of samples to host memory. The low-cost PCI-1714UL offers 10 MS/s on each channel at a stable rate, and has also been equipped with a universal PCI interface.

## Specifications

### Analog Input

- Channels** 4 single-ended
- Resolution** 12 bits
- Max. Sampling Rate** PCI-1714U: 30 MS/s per channel  
PCI-1714UL: 10 MS/s per channel
- FIFO Size** PCI-1714U: 32,768 samples each channel  
PCI-1714UL: 8,192 samples each channel
- Overvoltage Protection** 30 Vp-p
- Input Impedance** 50 Ω/1 MΩ/Hi Z jumper selectable/100 pF
- Sampling Modes** Software polling, pacer
- Trigger Modes** Post-trigger, pre-trigger, delay-trigger, about-trigger
- Input Range (V, software programmable) & Absolute Accuracy**

Bipolar	±5	±2.5	±1	±0.5
Absolute Accuracy (% of FSR)*	0.1	0.2	0.2	0.4

\* ±1 LSB is added as the derivative for absolute accuracy

### General

- Bus Type** Universal PCI V2.2
- I/O Connectors** 4 x BNC connector (for AI)  
1 x PS/2 connector (for Ext. clock and trigger)
- Dimensions (L x H)** 175 x 100 mm (6.9" x 3.9")
- Power Consumption** Typical: 5 V @ 850 mA ; 12 V @ 600 mA  
Max.: 5 V @ 1 A; 12 V @ 700m A
- Operating Temperature** 0 ~ 60°C (32 ~ 140°F)
- Storage Temperature** -20 ~ 85°C (-4 ~ 185°F)
- Storage Humidity** 5 ~ 95% RH, non-condensing

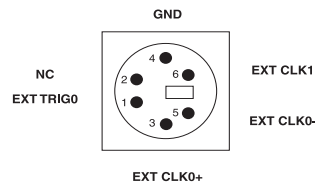
## Ordering Information

- PCI-1714U** 30 MS/s, 12-bit, Simultaneous 4-ch AI PCI Card
- PCI-1714UL** 10 MS/s, 12-bit, Simultaneous 4-ch AI PCI Card

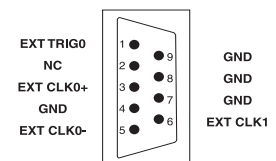
### Accessories

- ADAM-3909** DB9 DIN-rail Wiring Board
- PCL-1010B-1E** BNC to BNC Wiring Cable, 1 m
- PCL-10901-1E** DB9 to PS/2 Cable, 1 m
- PCL-10901-3E** DB9 to PS/2 Cable, 3 m

## Pin Assignments



Onboard PS/2 Connector



PS/2 To DB9 Cable Connector