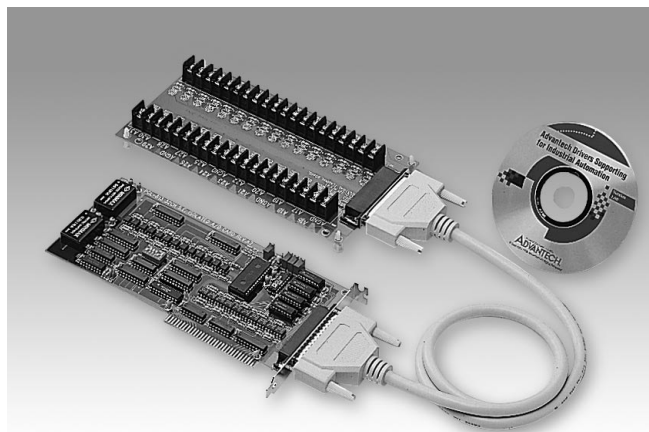


PCL-813B

32-ch S.E. Isolated Analog Input Card



PCL-813B

PCLD-881

PCL-10137



Features

- 32 single-ended analog input channels
- Over 500 V_{DC} isolation
- 12-bit successive approximation A/D converter
- Analog input ranges (V): ± 5 , ± 2.5 , ± 1.25 , ± 0.625 , 0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25
- Program-controlled A/D trigger and data transfer

Introduction

The PCL-813B is a 12-bit 32-channel A/D card which offers high-voltage isolation on each analog input. The PCL-813B is an extremely cost effective solution for applications in industrial measurement and monitoring. The card offers 32 A/D channels with software programmable gain on each channel and two DC-to-DC converters on a 4-layer PCB with an integral ground plane. Optically-isolated inputs provide over 500 V_{DC} of isolation between the analog inputs and the PC, protecting the PC and peripherals from damage due to high voltages on the input lines. The PCL-813B is ideal for situations where the budget-conscious user requires flexibility, stability and a high level of isolation protection. The PCL-813B comes with the PCLD-881 wiring terminal board and a DB-37 cable assembly.

Specifications

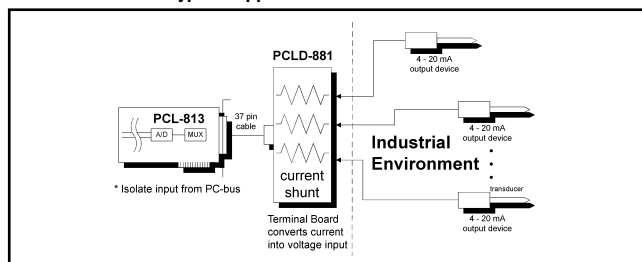
Input

- **Channels** 32 single-ended with isolation
- **Resolution** 12 bits, SAR
- **Input Ranges** Bipolar: ± 5 V, ± 2.5 V, ± 1.25 V, ± 0.625 V (software programmable)
Unipolar: 0 ~ 10 V, 0 ~ 5 V, 0 ~ 2.5 V, 0 ~ 1.25 V (jumper selectable)
- **Over Voltage** continuous ± 30 V (max.)
- **Converter** AD574 (or equivalent) w/25 μ sec. conversion time
- **Data Transfer Rate** 25 KHz maximum, software control only
- **Offset Error** 0 ~ 5 V: ± 1 LSB
 ± 5 V, 0 ~ 10 V: ± 2 LSB
- **Accuracy** 0.01% of reading ± 1 LSB
- **Isolation Voltage** > 500 V_{DC} from analog input to PC
- **Trigger Mode** software trigger
- **Input Impedance** > 10 M Ω
- **Temperature Coefficient** ± 25 PPM/ $^{\circ}$ C

General

- **Power Consumption** +5 V @ 660 mA max.
+12 V @ 140 mA max.
- **Operating Temperature** 0 $^{\circ}$ ~ 50 $^{\circ}$ C (32 $^{\circ}$ ~ 122 $^{\circ}$ F)
- **Storage Temperature** -20 $^{\circ}$ ~ 65 $^{\circ}$ C (-4 $^{\circ}$ ~ 149 $^{\circ}$ F)
- **Operating Humidity** 5% ~ 95% RH non-condensing (refer to IEC 68-2-3)
- **I/O Connector** DB-37 female connector for input port
- **Dimensions** 219 mm (L) x 100 mm (H) (8.6" x 3.9")

Typical application for the PCL-813B:



Industrial 4 ~ 20 mA output device monitoring

Ordering Information

- **PCL-813B** 32-ch. isolated analog input card, PCLD-881B wiring terminal board, DB-37 cable assembly, manual and driver CD-ROM.
- **PCLD-881B** Industrial terminal board for PCL-1713 & PCL-813B
- **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
- **ADAM-3937** DB-37 wiring terminal for DIN-rail mounting