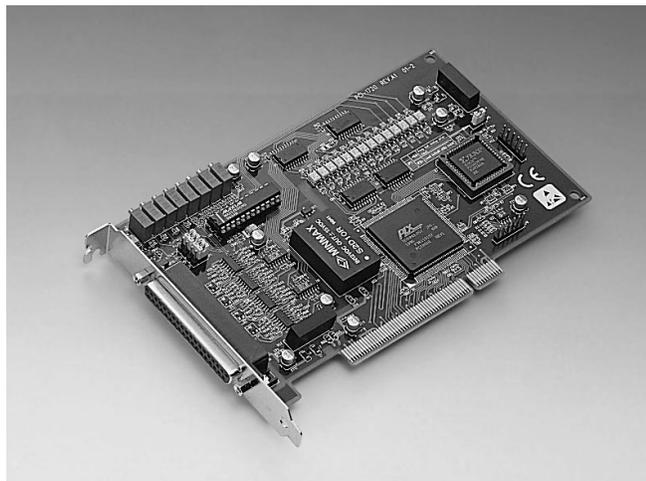


# PCI-1720

## 4-ch Isolated Analog Output Card



CE

### Features

- Four 12-bit D/A output channels
- Multiple output ranges
- 2,500 V<sub>DC</sub> isolation between the outputs and the PCI bus
- Keeps the output settings and values after system reset
- One DB-37 connector for easy wiring

### Introduction

The PCI-1720 provides four 12-bit isolated digital-to-analog outputs for the PCI bus. With isolation protection of 2500 VDC between the outputs and the PCI bus, the PCI-1720 is ideal for industrial applications where high-voltage protection is required.

#### Keeping the Output Settings and Values after System Reset

Users can independently set the four outputs to different ranges: 0 to +5 V, 0 to +10 V, ±5 V, ±10 V, 0 to 20 mA (sink) or 4 to 20 mA (sink). When the system is hot reset, (power is not shut off), the PCI-1720 can either retain the last analog output settings and values, or return to its default configuration, depending on jumper setting. This practical function eliminates danger caused by misoperation during an unexpected system reset.

#### PCI-Bus Plug-and-play

The PCI-1720 uses a PCI controller to interface the card to the PCI bus. The controller fully implements the PCI bus specification Rev 2.1. All bus relative configurations, such as base address and interrupt assignment, are automatically controlled by software.

### Specifications

- **Channels** 4 isolated D/A channels
- **Resolution** 12 bits
- **Output Range** Unipolar: 0 ~ +5 V, 0 ~ +10 V  
Bipolar: ±5 V, ±10 V  
Current loop (sink): 0~ 20 mA, 4 ~ 20 mA
- **Throughput** 15 KHz min. @ full-scale output range
- **Accuracy** ±0.024%
- **Isolation Voltage** 2,500 V<sub>DC</sub> between the outputs and the PCI bus
- **Temperature Drift** Typical: 10 PPM/° C (0 ~ 60° C) (32 ~ 140° F)  
Maximum: 20 PPM/° C (0 ~ 60° C) (32 ~ 140° F)
- **Output Drive** ±5 mA max.
- **Current Loop Excitation Voltage** 50 V (max.)
- **On-board 12 VDC Excitation Voltage** 80 mA (max.)
- **Power Consumption** +5 V @ 350 mA (typical), 500 mA (max.)  
+12 V @ 200 mA (typical), 350 mA (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)
- **Connector** DB-37 connector
- **Dimensions (L x H)** 175 x 100 mm (6.9" x 3.9")

- **ADAM-3937** DB-37 Wiring terminal for DIN-rail mounting
- **PCLD-880** Screw terminal board

### Applications

- Process control
- Programmable voltage source
- Programmable current sink
- Servo control

### Pin Assignments

NC	1	20	NC
+12 Vout	2	21	NC
AGND	3	22	NC
AGND	4	23	NC
Vout 0	5	24	NC
AGND	6	25	NC
Isin k 0	7	26	NC
AGND	8	27	NC
AGND	9	28	NC
Isin k 1	10	29	NC
Vout 2	11	30	NC
AGND	12	31	NC
Isin k 2	13	32	NC
Vout 3	14	33	NC
AGND	15	34	NC
Isin k 3	16	35	NC
NC	17	36	NC
NC	18	37	NC
NC	19		

### Ordering Information

- **PCI-1720** 4-channel Isolated D/A Output Card, user's manual and driver CD-ROM. (cable not included)
- **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