# PCI-1720 PCI-1720U

## 4-ch Isolated Analog Output Card



## 4-ch Universal Isolated Analog Output Card

### **Features**

- Four 12-bit D/A output channels
- Multiple output ranges
- 2,500 V<sub>pc</sub> isolation between the outputs and the PCI bus
- · Keeps the output settings and values after system reset
- One DB37 connector for easy wiring
- Universal PCI and BoardID switch (PCI-1720U only)

## Introduction

The PCI-1720 provides four 12-bit isolated digital-to-analog outputs for the PCI bus. With isolation protection of 2500 V<sub>DC</sub> 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 & 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  $V_{\text{pc}}$  between the outputs and the PCI bus ±5 mA max. Output Drive Current Loop Excitation 50 V (max.) Voltage On-board 12 VDC 80 mA (max.) **Excitation Voltage**  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 175 x 100 mm (6.9" x 3.9") Dimensions (L x H) **Ordering Information** PCI-1720 4-channel Isolated Output Card, user's manual and driver CD-ROM. (cable not included) PCL-10137-1 DB37 cable assembly, 1m PCL-10137-2 DB37 cable assembly, 2m
- PCL-10137-3 DB37 cable assembly, 3m
  PCI-1720U 4-channel Isolated Output Card, user's manual and driver CD-ROM. (cable not included)

- ADAM-3937
  PCLD-880
- DB37 Wiring terminal for DIN-rail mounting Screw terminal board

## Applications

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

## **Pin Assignments**

	$\sim$		
NC	1	20	NC
+12 Vout	2	20	NC
AGND	3	21	NC
AGND	4	22	NC
Vout 0	5	23	NC
ACND		24	NC
AGND	0	25	NC
lsin k 0	7	26	NC
AGND	8	27	NC
AGND	9	28	NC
lsin k 1	10	20	NC
Vout 2	11	29	INC.
AGND	12	30	NC
lsin k 2	13	31	NC
Vout 3	14	32	NC
	15	33	NC
AdinD		34	NC
Isin K 3	16	35	NC
NC	17	36	NC
NC	18	37	NC
NC	19	/	
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