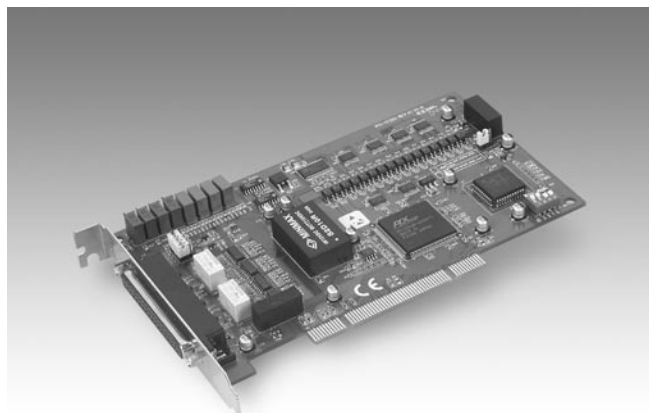


# PCI-1720U

## 4-ch Universal 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 DB37 connector for easy wiring
- Universal PCI and BoardID™ switch

### Introduction

The PCI-1720U provides four 12-bit isolated digital-to-analog outputs for the Universal PCI bus. With isolation protection of 2500 V<sub>DC</sub> between the outputs and the PCI bus, the PCI-1720U 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,  $\pm 5$  V,  $\pm 10$  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-1720U 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-1720U uses a PCI controller to interface the card to the PCI bus. The controller fully implements the PCI bus specification Rev 2.2. All bus relative configurations, such as base address and interrupt assignment, are automatically controlled by software.

### Specifications

#### Analog Output

- **Channels** 4 isolated channels
- **Resolution** 12 bits
- **Output Rate** Static update
- **Output Range** (Software programmable)

Internal Reference	Unipolar (V)	0 ~ 5, 0 ~ 10
	Bipolar (V)	$\pm 5$ , $\pm 10$
	Current Loop (mA)	0 ~ 20, 4 ~ 20

- **Slew Rate** 2 V/ $\mu$ s
- **Isolation Protection** 2,500 V<sub>DC</sub> (between the outputs and the PCI bus)
- **Driving Capability**  $\pm 5$  mA max.
- **Operation Modes** Software polling
- **Accuracy**  $\pm 0.024\%$
- **Current Loop Excitation Voltage** 50 V (max.)

#### General

- **Bus Type** PCI-1720: PCI V2.2  
PCI-1720U: Universal PCI 2.2
- **I/O Connectors** 1 x DB37-F
- **Dimensions (L x H)** 175 x 100 mm (6.9" x 3.9")
- **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)
- **Storing Temperature** -20 ~ +70° C (-4 ~ 158° F)
- **Storing Humidity** 5 ~ 95% RH, non-condensing (refer to IEC 68-2-3)
- **Certifications** CE

### Ordering Information

- **PCI-1720U** 4-ch universal PCI Isolated Analog 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
- **ADAM-3937** DB37 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
Isink 0	7	26	NC
Vout 1	8	27	NC
AGND	9	28	NC
Isink 1	10	29	NC
Vout 2	11	30	NC
AGND	12	31	NC
Isink 2	13	32	NC
Vout 3	14	33	NC
AGND	15	34	NC
Isink 3	16	35	NC
NC	17	36	NC
NC	18	37	NC
NC	19		