

Features

- Four 12-bit D/A output channels
- Multiple output ranges
- 2500 V_{DC} 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 V_{DC} 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 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.

Applications

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

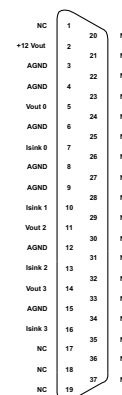
Specifications

- **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:**
2500 V_{DC} between the outputs and the PCI bus
- **Temperature drift:** Typical: 10 PPM/° C (0 ~ 60° C)

Maximum: 20 PPM/° C (0 ~ 60° C)

- **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:** 175 mm (L) x 100 mm (H) (6.9" x 3.9")

Pin Assignments



Ordering Information

- **PCI-1720:** 4-channel Isolated D/A Output Card, user's manual and driver CD-ROM.
- **PCI-10137:** DB-37 cable assembly, 1 m
- **PCLS-OCX:** ActiveX Control for data acquisition and control
- **ADAM-3937:** DB-37 Wiring terminal for DIN-rail mounting
- **PCLD-880:** Screw terminal board