

PCI-6308V/6308A

8-CH 12-Bit Isolated Analog Output Cards



PCI-6308A

Features

- Supports a 32-Bit 5 V PCI bus
- 12-Bit D/A resolution (PCI-6308V & PCI-6308A)
- Isolated 8-CH 12-Bit voltage output (PCI-6308V & PCI-6308A)
- Isolated 8-CH 12-Bit current output (PCI-6308A)
- Bipolar or unipolar output ranges
- External reference input for user-defined ranges
- 4-CH isolated digital outputs and 4-CH isolated digital inputs
- 2500 V_{RMS} optical isolation
- Compact, half-size PCB
- Supported Operating System
 - Windows 7/8 x64/x86, Linux
- Driver and SDK
 - LabVIEW, MATLAB, C/C++, Visual Basic, Visual Studio.NET

Specifications

Isolated Analog Output

- Number of channels: 8 voltage outputs (PCI-6308V & PCI-6308A)
- Resolution: 12 Bit
- Output ranges (jumper selectable)

	Input Range
Bipolar	± 10 V
Unipolar	0 to 10 V, 0 to EXTREF

- Settling time: 16 μ s (20 V step)
- Maximum update interval:
 - 90 μ s for four channels simultaneously
- Gain error: ± 0.2 % max.
- DNL: ± 1 LSB
- Output driving capacity: ± 5 mA
- Isolation voltage: 2500 V_{RMS}
- Output initial status:
 - 0 V (after RESET or POWER-ON)
- Data transfers: programmed I/O

Current Output (PCI-6308A)

- Number of channels: 8
- Resolution: 12 bit
- Output ranges (software programmable):
 - 0-20 mA, 4-20 mA, and 5-25 mA
- Gain error: 0.3%
- Settling time: 17 μ s (0-20 mA)
- Slew rate: 1.3 mA/ μ s
- DNL: ± 1 LSB maximum
- Output resistance: 10 G Ω typical
- Current load resistance: 0 - 500 Ω
- Output initial status:
 - 4 mA (after RESET or POWER-ON)
- Data transfer: programmed I/O

Isolated Digital Input

- Number of channels: 4
- Maximum input range: 24 V, non-polarity
- Digital logic levels
 - Input high voltage: 5 - 24 V
 - Input low voltage: 0 - 1.5 V
- Input resistance: 2.4 k Ω @ 0.5 W
- Isolation voltage: 2,500 V_{RMS}
- Data transfers: programmed I/O

Isolated Digital Output

- Number of channels: 4 (PCI-6308V & PCI-6308A)
- Output type: photo-coupler transistors
- Supply voltage: 5 to 35 V
- Isolation voltage: 2,500 V_{RMS}
- Data transfers: programmed I/O

General Specifications

- I/O connector: 37-pin D-sub female
- Operating temperature: 0°C to 55°C (32°F to 131°F)
- Storage temperature: -20°C to 80°C (-4°F to 176°F)
- Relative humidity: 5% to 95%, non-condensing
- Power requirements

Device	+5 V	+12 V
PCI-6308V	220 mA typical	175 mA typical
PCI-6308A	220 mA typical	250 mA typical 530 mA maximum

- Dimensions (not including connectors)
175 mm x 107 mm (6.82" x 4.17")

Terminal Boards & Cables

DIN-37D-01

Terminal Board with One 37-pin D-sub Connector and DIN-Rail Mounting (Cables are not included.)

ACLD-9137-01

General-Purpose Terminal Board with One 37-pin D-sub Male Connector

ACL-10137-1MM

37-pin D-sub male/male cable, 1 M

ACL-10137-1MF

37-pin D-sub male/female cable, 1 M

* For more information on mating cables, please refer to P3-48/49.

Ordering Information

PCI-6308V

8-CH 12-Bit Isolated Voltage Output Card

PCI-6308A

8-CH 12-Bit Isolated Voltage & Current Output Card