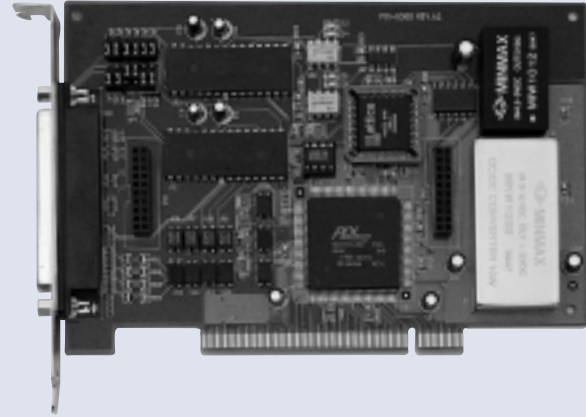


# PCI-6308 Series

Isolated 8-CH 12-bit  
Analog Output Cards

## Features

- 32-bit PCI-Bus, Plug and Play
- Isolated 8 channels 12-bit voltage output
- 2500Vrms Isolation voltage
- Jumper selectable output ranges: bipolar voltage output range  $\pm 10V$ , or unipolar voltage output range  $0\sim+10V$ , or unipolar  $0\sim$  external VREF
- Settling time  $16\mu\text{sec}$  from  $-10V\sim+10V$
- 4-CH isolated digital output
- 4-CH isolated digital input
- Current output version available



## Specifications

### Isolated Voltage Output

- Number of Channels: 8 channels
- Resolution: 12-bit
- Output ranges: (jumper selectable)
  - Bipolar  $\pm 10V$
  - Unipolar  $0\sim 10V$
  - Unipolar  $0\sim$ External Vref
- Conversion: B.B. DAC 4814 or equivalent, monolithic multiplying
- Settling time:  $16\mu\text{second}$  (from  $-10V$  to  $+10V$ )
- DA update time:  $90\mu\text{ second}$  for four channels simultaneously
- Gain error:  $\pm 0.2\%$  (max, without trimming, with internal  $10.0V$  ref)
- Output driving capability:  $\pm 5\text{mA}$
- Isolation voltage:  $2500\text{ V rms}$
- Data transfer: programmed I/O
- Output initial status:  $0V$  (after RESET or POWER-ON)

### Current Output(PCI-6308A only)

- Number of channels: 8 channels
- Output ranges: Programmable
  - $0\sim 20\text{mA}$ ,  $4\sim 20\text{mA}$ ,  $5\sim 25\text{mA}$
- Voltage to current converter: XTR110
- Settling time:  $17\mu\text{ second}$
- Slew rate:  $1.3\text{ mA}/\mu\text{s}$
- Non-linearity:  $\pm 0.01\%$  of span
- Span error: initial  $0.3\%$  of span
- Output resistance:  $10\Omega\text{max.}$
- Output initial status:  $0\text{mA}$  (after RESET or POWER-ON)

### Isolated Digital Input

- Number of channels: 4 DI
- Photo Isolator: PC814,  $5000\text{ Vrms}$  isolation voltage
- Input resistance:  $4.7K\text{ Ohm}$
- Max  $24V\text{ DC}$  input

### Isolated Digital Output

- Number of channels: 4 DO
- Photo Isolator: PC-817,  $5000\text{ Vrms}$  isolation voltage
- Max sink current:  $50\text{ mA}$

### General Specifications

- I/O connectors: D37 connector
- Operating temperature:  $0^\circ\sim 60^\circ\text{C}$
- Storage temperature:  $-20^\circ\sim 80^\circ\text{C}$
- Humidity:  $5\sim 95\%$ , non-condensing
- Power requirement:
  - PCI-6308V
    - $+5V@ 220\text{ mA}$  typical
    - $+12V@ 175\text{ mA}$  typical
  - PCI-6308A
    - $+5V@ 220\text{ mA}$  typical
    - $+12V@ 530\text{ mA}$  maximum (when all channels  $25\text{mA}$  output)
- Dimension: half-size  $172\text{ mm} \times 105\text{ mm}$

### Termination Boards

- ACLD-9188    • ACLD-9137
- DIN-37D

## Ordering Information

### PCI-6308V

Isolated 8-CH 12-bit voltage output card

### PCI-6308A

Isolated 8-CH 12-bit voltage and current output card

Note: The above products are shipped with software development kit for DOS/Win-95/98/NT/2000, PCIS-LVIEW and PCIS-VEE.

### Pin Assignments of DB-37 Connector for PCI-6308V[A]

DI3 (1)	○	(20) DO3
DI2 (2)	○	(21) DO2
DI1 (3)	○	(22) DO1
DI0 (4)	○	(23) DO0
Iso.GND (5)	○	(24) Iso.GND
ExtRef (6)	○	(25) -15V
+15V (7)	○	(26) A.GND
A.GND (8)	○	(27) (A7)
(A6) (9)	○	(28) V7
V6 (10)	○	(29) A.GND
A.GND (11)	○	(30) (A5)
(A4) (12)	○	(31) V5
V4 (13)	○	(32) A.GND
A.GND (14)	○	(33) (A3)
(A2) (15)	○	(34) V3
V2 (16)	○	(35) A.GND
A.GND (17)	○	(36) (A1)
(A0) (18)	○	(37) V1
V0 (19)	○	