

PCI/PCIe/cPCI-6208/6216 Series

8/16-CH 16-Bit Analog Output Cards

CompactPCI
PCI EXPRESS® **PCI**
PERIPHERAL COMPONENT INTERFACES



PCI-6208V-GL



PCIe-6208V-GL



cPCI-6208V-GL

Features

- Supports a 32-Bit 3.3 V or 5 V PCI bus (PCI-6208/6216-GL)
- x1 lane PCI Express® Interface (PCIe-6208-GL)
- 3U Eurocard form factor, CompactPCI compliant PICMG 2.0 R2.1 (cPCI-6208/6216 series)
- 16-Bit D/A resolution
- Effective 15-Bit resolution current transducers (PCI-6208A)
- 8-CH voltage outputs (PCI/PCIe/cPCI-6208V-GL)
- 16-CH voltage outputs (PCI/cPCI-6216V-GL)
- 8-CH current outputs (PCI-6208A)
- Bipolar analog output range
- 4-CH TTL digital inputs and 4-CH TTL digital outputs

■ Supported Operating System

- Windows 7/8 x64/x86, Linux

■ Driver and SDK

- LabVIEW, MATLAB, C/C++, Visual Basic, Visual Studio.NET

Specifications

Voltage Output

- Number of channels
 - 8 voltage outputs (PCI/PCIe/cPCI-6208V-GL & PCI-6208A)
 - 16 voltage outputs (PCI/cPCI-6216V-GL)
- Resolution: 16 Bit
- Monotonicity: 15 Bit typical
- Output ranges: ± 10 V
- Slew rate: 26 V/ μ s typical
- Settling time: 130 μ s typical (20 V step)
- Gain Error: $\pm 0.2\%$ maximum
- DNL: ± 1 LSB typical
- Output driving capacity: ± 5 mA maximum
- Output initial status: 0 V
- Data transfer: programmed I/O

Current Output

- Number of channels: 8 current outputs (PCI-6208A)
- Resolution: 15 Bit typical
- Monotonicity: 14 Bit typical
- Output ranges: (Software programmable)
0-20 mA, 4-20 mA, 5-25 mA
- Slew rate: 1.3 mA/ μ s typical
- Settling time: 17 μ s typical (20 mA step)
- Span Error: $\pm 0.3\%$ typical
- Output Initial Status: 4 mA (after RESET or POWER-ON)
- Data transfer: programmed I/O

Digital I/O

- Number of channels: 4 inputs and 4 outputs
- Compatibility: 5 V/TTL
- Data transfers: programmed I/O

General Specifications

- I/O connector: One 37-pin D-sub female
- Operating temperature: 0°C to 50°C (32°F to 122°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-6208V-GL	650 mA typical	170 mA typical
PCI-6216V-GL	1.2 A typical	280 mA typical
PCI-6208A	670 mA typical	380 mA typical
cPCI-6208V	500 mA typical	200 mA typical
cPCI-6216V	1 A typical	300 mA typical

Device	+3.3 V	+12 V
PCIe-6208V-GL	310 mA typical	380 mA typical

- Dimensions (not including connectors)
175 mm x 107 mm (6.82" x 4.17") (PCI-6208/6216)
168 mm x 112 mm (6.55" x 4.36") (PCIe-6208)
160 mm x 100 mm (6.24" x 3.9") (cPCI-6208/6216)

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

■ ACLD-9137F-01

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

■ ACL-10137-IMM

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

■ ACL-10137-IMF

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

Ordering Information

■ PCI-6208V-GL

8-CH 16-Bit Voltage Output Card

■ PCI-6216V-GL

16-CH 16-Bit Voltage Output Card

■ PCI-6208A

8-CH 16-Bit Voltage and Current Output Card

■ cPCI-6208V-GL

8-CH 16-Bit Voltage Output Module

■ cPCI-6216V-GL

16-CH 16-Bit Voltage Output Module

■ PCIe-6208V-GL

8-CH 16-Bit Voltage Output PCI Express® Card