

# cPCI-6208 Series

## 8/16-CH 16-Bit Analog Output Modules

### Features

- 3U Eurocard form factor, CompactPCI compliant (PICMG 2.0 R2.1)
- 16-bit D/A resolution
- Effective 15-bit resolution current transducers (cPCI-6208A(R))
- 8-CH voltage outputs (cPCI-6208V(R) & cPCI-6208A(R))
- 16-CH voltage outputs (cPCI-6216V)
- 8-CH current outputs (cPCI-6208A(R))
- Bipolar (10 V output range)
- 4-CH TTL digital inputs & 4-CH TTL digital outputs
- Rear I/O available on the cPCI-6208VR, cPCI-6208AR & cPCI-6216VR

### Operating Systems

- • Windows 2000/NT/XP/98
- • Red Hat Linux
- • Windows CE (call for availability)

### Recommended Software

- • A/B/VC++/BCB/Delphi
- • DAQBench

### Driver Support

- • PCIS-DASK for Windows 2000/NT/XP/9x
- • PCIS-DASK/X for Red Hat Linux
- • PCIS-OCX ActiveX controls
- • PCIS-LVIEW/PnP for LabVIEW **NEW!**



cPCI-6208V

### Introduction

ADLINK cPCI-6208 series are 8 or 16-CH, 16-bit, analog output modules for PXI/CompactPCI form factor. The cPCI-6208V(R) offers 8 voltage outputs with (10 V range, featuring 15-bit monotonicity and 10 V/s slew rate. The on-board analog switches minimize the power-on glitches. For higher analog output density requirements, the cPCI-6216VR (rear IO version) expands the voltage output channels to a total of 16. On the rear I/O versions of cPCI-6208 series, users are able to perform on-line calibration through the front panel trim pots.

In addition to the voltage output functions, the cPCI-6208A(R) features 8 current outputs with ranges of 0-20 mA, 4-20 mA and 5-25 mA. With the high-quality on-board current transducers, the device is capable of delivering 14-bit monotonicity with 1.3 mA/s slew rate.

ADLINK cPCI-6208 series devices provide high-resolution, high-density analog output functionalities for ATE, signal generation, and other industrial control applications.

### Specifications

#### Voltage Output

- Number of channels
  - • 8 voltage outputs (cPCI-6208V, cPCI-6208VR & cPCI-6208A)
  - • 16 voltage output (cPCI-6216VR)
- Resolution: 16 bits
- Monotonicity: 15 bits typical
- Output ranges:  $\pm 10$  V
- Slew rate: 10 V/ $\mu$ s typical
- Settling time: 4  $\mu$ s typical (20 V step)
- Gain Error:  $\pm 0.2\%$  maximum
- DNL:  $\pm 0.65$  LSB typical
- Output driving capacity:  $\pm 5$  mA maximum
- Output Initial Status: 0 V
- Data transfers: programmed I/O

#### Current Output

- Number of channels:
  - 8 current outputs (cPCI-6208A & cPCI-6208AR)
- Resolution: 15 bits typical
- Monotonicity: 14 bits typical
- Output ranges: (Software programmable)
  - 0-20 mA, 4-20 mA, 5-25 mA
- Slew rate: 1.3 mA/ $\mu$ s typical
- Settling time: 17  $\mu$ s typical (20 mA step)
- Span Error:  $\pm 0.3\%$  typical
- Output Initial Status:
  - 4 mA (after RESET or POWER-ON)
- Data transfers: 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: 37-pin D-sub female
- Operating temperature: 0 to 60 °C
- Storage temperature: -20 to 80 °C
- Relative humidity: 5 to 95 %, noncondensing
- Power requirements

Device	+5 V	+12 V
cPCI-6208V(R)	580 mA typical	90 mA typical
cPCI-6216VR	1200 mA typical	300 mA typical
cPCI-6208A(R)	600 mA typical	380 mA typical

- Dimensions (not including connectors)  
160 mm x 100 mm