

# PCI-9113A

## 32-CH 12-Bit 100 kS/s Isolated Analog Input Card



### Features

- Supports a 32-Bit 5 V PCI bus
- 12-Bit A/D resolution
- Up to 100 kS/s sampling rate
- 32-CH single-ended or 16-CH differential inputs
- Onboard 1 k-sample A/D FIFO
- Bipolar or unipolar analog input ranges
- Programmable gains of x1, x10, x100
- Automatic analog inputs scanning
- Onboard low-pass filtering capability for analog inputs
- 2500 VRMS 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
- Software Utility
  - AD-Logger

### Specifications

#### Analog Input

- Number of channels: 32 single-ended or 16 differential
- Resolution: 12 Bit
- Conversion time: 8  $\mu$ s
- Maximum sampling rate: 100 kS/s
- Input signal ranges

Gain	Input Range		
	Bipolar		Unipolar
1	$\pm 10$ V	$\pm 5$ V	0 to 10 V
10	$\pm 1$ V	$\pm 0.5$ V	0 to 1 V
100	$\pm 0.1$ V	$\pm 0.05$ V	0 to 0.1 V

- Accuracy: 0.01% of FSR  $\pm$  1 LSB
- Input coupling: DC
- Overvoltage protection: continuous  $\pm 35$  V
- Input impedance: 1 G $\Omega$
- Trigger modes: software
- FIFO buffer size: 1 k samples
- Data transfers: polling, interrupt
- Isolation Voltage: 2500 VRMS

#### 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

+5 V
960 mA typical
- Dimensions (not including connectors)  
173 mm x 107 mm (6.74" 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-9113A  
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