

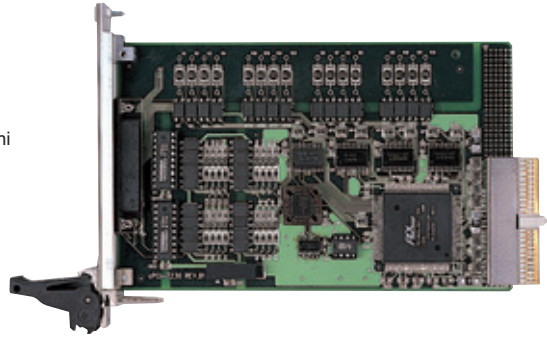
# cPCI-7230

## 16-CH Isolated DI & 16-CH Isolated DO Module

### Features

- 3U Eurocard form factor, CompactPCI compliant (PICMG 2.0 R2.1)
- 16-CH isolated digital inputs and 16-CH isolated digital outputs
- Non-polarity digital input range
- 5000 V<sub>RMS</sub> optical isolation
- Sink current up to 500 mA on each isolated output
- Isolated input voltage up to 24 V
- Two external interrupt sources

- **Operating Systems**
  - Windows Vista/XP/2000/2003
  - Linux
  - Windows CE (call for availability)
- **Recommended Software**
  - VB.NET/VC.NET/VB/VC++/BCB/Delphi
  - DAQBench
- **Driver Support**
  - DAQPilot for Windows
  - DAQ-LVIEW PnP for LabVIEW™
  - DAQ-MTLB for MATLAB®
  - PCIS-DASK for Windows
  - PCIS-DASK/X for Linux



### Introduction

ADLINK cPCI-7230 is a 16-CH isolated digital input and 16-CH isolated digital output module for PXI/CompactPCI form factor. The device provides a robust 5,000 V<sub>RMS</sub> isolation protection which is suitable for most industrial applications. The wide input range makes the cPCI-7230 easy to sense the status of external devices. A potential difference of 3 to 24 V between two input terminals is logic high. Logic low is between 0 to 1 V. The device features a wide output range from 5 to 35 V, suitable for relay driving and industrial automation applications. It also provides two interrupt sources on digital input channels, which are easily user-configurable.

### Specifications

#### Isolated Digital Input

- Number of channels:
  - 16 (IDIO-7 have individual connections and IDI8-15 share a common connection.)
- Maximum input range: 24 V, non-polarity
- Digital logic levels
  - 0-24V, non-polarity
    - ◆ Input high voltage: 3-24 V
    - ◆ Input low voltage: 0-1 V
- Input Resistance: 1.2 kΩ @ 0.5 W
- Isolation voltage: 5000 V<sub>RMS</sub>
- Interrupt sources: digital input channel 0 and 1
- Data transfers: programmed I/O

#### Isolated Digital Output

- Number of channels: 16
- Output type: open collector Darlington transistor
- Sink current
  - 500 mA for one channel @ 100% duty
  - 500 mA for all channels @ 20% duty
- Power dissipation
  - Max. 2.25 W per chip (8 DO channels)
- Supply voltage: 5-35 V<sub>DC</sub>
- Isolation voltage: 5000 V<sub>RMS</sub>
- Data transfers: programmed I/O

#### General Specifications

- I/O connector: 50-pin SCSI-II female
- Operating temperature: 0 to 60°C
- Storage temperature: -20 to 80°C
- Relative humidity: 5 to 95%, non-condensing
- Power requirements

Device	+5 V
cPCI-7230	270 mA typical

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

### Termination Boards

- **DIN-50S-01**  
Termination Board with a 50-pin SCSI-II Connector and DIN-Rail Mounting (Cables are not included). For information on mating cables, refer to Section 12.)

### Pin Assignment

VDD	1	26	VDD
EOGND	2	27	EOGND
EOGND	3	28	EOGND
EOGND	4	29	EOGND
IDO_7	5	30	IDO_14
IDO_6	6	31	IDO_15
IDO_5	7	32	IDO_12
IDO_4	8	33	IDO_13
IDO_3	9	34	IDO_10
IDO_2	10	35	IDO_11
IDO_1	11	36	IDO_8
IDO_0	12	37	IDO_9
ID1_3H	13	38	ID1_7L
ID1_3L	14	39	ID1_7H
ID1_2H	15	40	ID1_6L
ID1_2L	16	41	ID1_6H
ID1_1H	17	42	ID1_5L
ID1_1L	18	43	ID1_5H
ID1_0H	19	44	ID1_4L
ID1_0L	20	45	ID1_4H
ID1_11	21	46	ID1_15
ID1_10	22	47	ID1_14
ID1_9	23	48	ID1_13
ID1_8	24	49	ID1_12
EICOM	25	50	EICOM

### Ordering Information

- **cPCI-7230**  
16-CH Isolated DI & 16-CH Isolated DO Module

- 1 Software Solutions
- 2 PXI/CompactPCI Platforms
- 3 Modular Instrument
- 4 PXI/CompactPCI Modules
- 5 Bus Interface
- 6 GPIB Interface
- 7 PCI/PCI Express® DAQ Cards
- 8 PCI/PCI Express® DIO Cards
- 9 PC/104-Plus Modules
- 10 ISA DAS/DIO Cards
- 11 System Product
- 12 Wiring Termination Boards
- 13 Motion, HSL, Vision, COM & GEME
- 14 Remote I/O Modules
- 15 Industrial Computers