

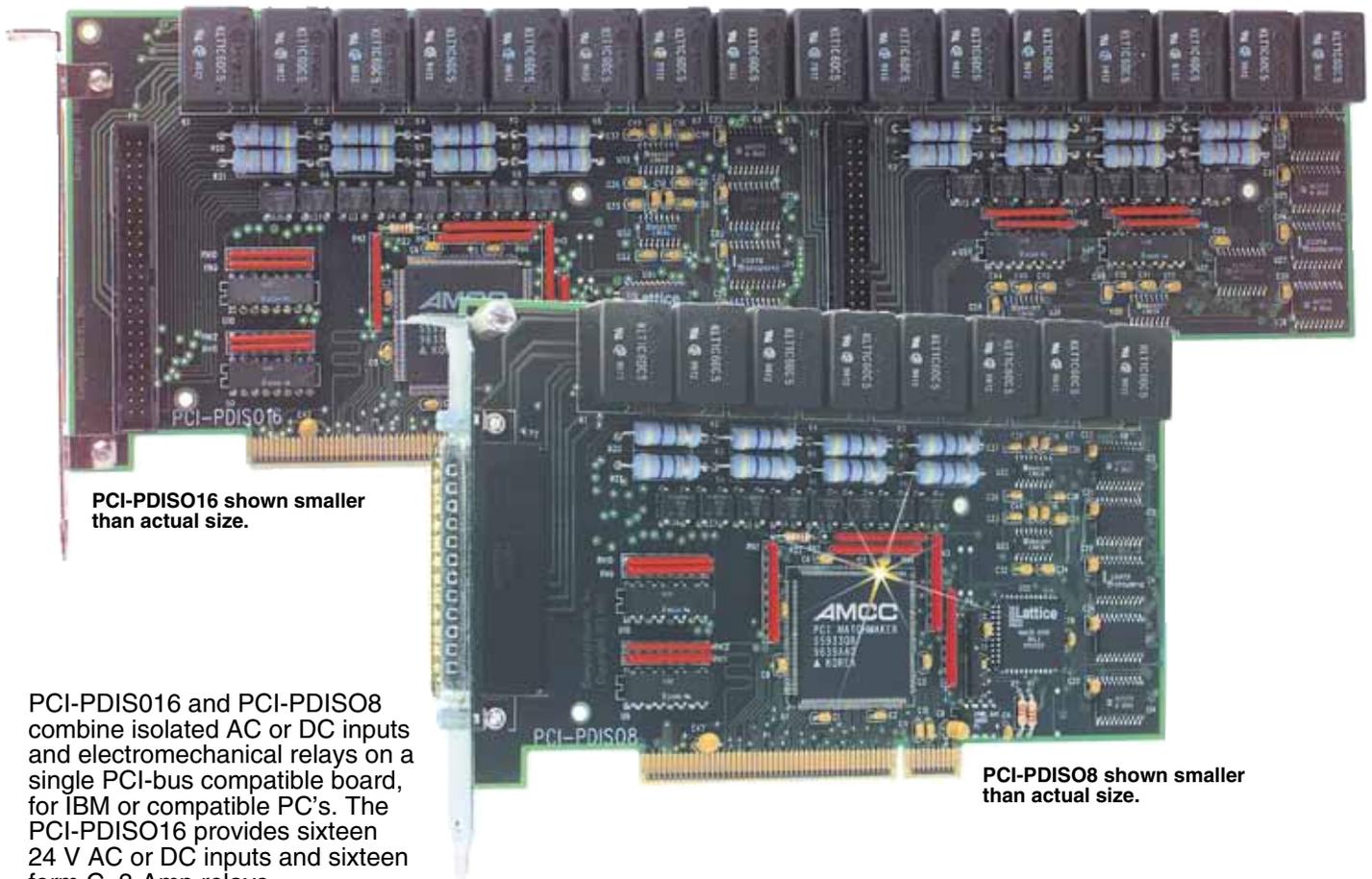
8- and 16-Channel High Voltage, High Current Digital I/O Boards for the PCI Bus

PCI-PDISO8
and PCI-PDISO16



✓ 8 or 16 High Voltage
(5 to 28V) AC/DC Digital
Input Channels

✓ 3 Amp, 120 Vac Relay
Output Control
✓ Fully Plug-and-Play



PCI-PDISO16 shown smaller than actual size.

PCI-PDISO8 shown smaller than actual size.

PCI-PDISO16 and PCI-PDISO8 combine isolated AC or DC inputs and electromechanical relays on a single PCI-bus compatible board, for IBM or compatible PC's. The PCI-PDISO16 provides sixteen 24 V AC or DC inputs and sixteen form C, 3-Amp relays.

The PCI-PDISO8 offer seven 24 V AC or DC and eight 3-Amp relay outputs (five form C, three form A). A software enabled input filter is available on all channels.

The boards are fully connector compatible with their ISA counterparts (CIO-PDISO16 and CIO-PDISO8). Both boards are also completely plug-and-play. There are no switches or jumpers on the board. All board addresses, interrupt channels, etc., are set by your computer's plug-and-play software.

Screw Terminal Boards

The PCI-PDISO16 board is compatible with the CIO-MINI50 via the C50FF-2 cable, while the PCI-PDISO8 is compatible with the CIO-MINI37 via a C37FF-2 cable. OMEGA cautions against the use of screw terminal boards in high voltage applications unless specific and professionally designed precautions are taken to avoid the possibility of accidental contact with hazardous high voltage signals.

Software Support

The PCI-PDISO series is supplied with InstaCal software for configuration and testing. It also includes the Universal Library that provides a fast, simple and powerful API that allows programmers to develop their own data acquisition applications using various programming languages. LabVIEW drivers are also included.

Specifications

RELAY OUTPUTS

Contact Configuration:

PCI-PDISO16: 16 form C

PCI-PDISO16: 5 form C,
3 form A (NO)

Contact Rating: 3 A @ 120 Vac
or 28 Vdc resistive

Contact Type: Gold overlay silver

Contact Resistance: 100
milliohms max

Operate Time: 20 milliseconds

Release Time: 10 milliseconds
max

Vibration: 10 to 55 Hz
(Dual amplitude 1.5 mm)

Dielectric Isolation: 500V
(1 minute)

Life Expectancy: 10 million
mechanical operations, min

ISOLATED INPUTS

PCI-PDISO16: 16

PCI-PDISO8: 8

DC input ranges: V_{in} low,
1.8 V, max; V_{in} high, 5V, min

AC input ranges (50 to 1000 Hz):
 V_{in} low, 1.8V_{p-p}, max; V_{in} high,
5.0V_{p-p}, min

Max input voltage: 28 Vdc
or 28 VRMS (50 to 1000 Hz)

Isolation: 500V

Resistance: 1.6 K Ω min

Response w/o filter: 20 μ s
(without filter), 5 ms (with filter)

Filter Control: Individually
programmable, filters disabled
on power-up/reset

POWER CONSUMPTION (+5V)

PCI-PDISO16: 0.7 A, all relays
OFF, 2.0 A, all relays ON

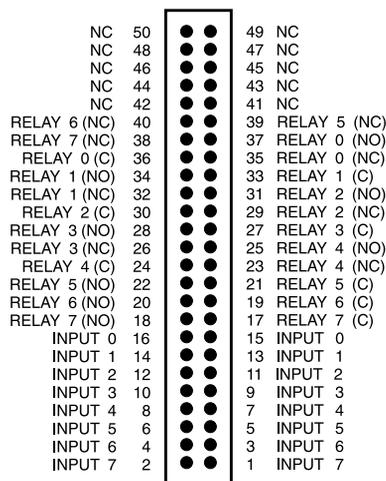
PCI-PDISO8: 0.4 A, all relays OFF,
1.0 A, all relays ON



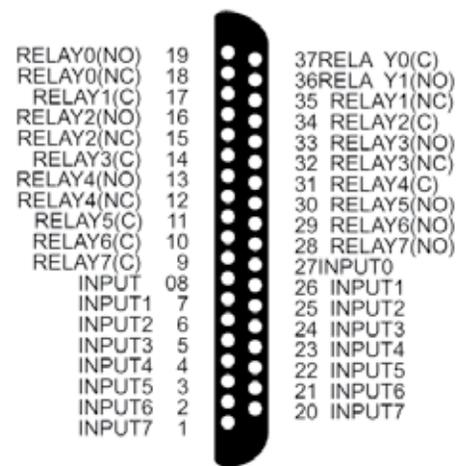
CIO-MINI50 terminal panel show
smaller than actual size.



CIO-MINI37 terminal panel
show smaller than actual size.



PCI-PDISO16 50-Pin Connector



PCI-PDISO8 37-Pin Connector

ENVIRONMENTAL

Operating temperature:

0 to 50°C (32 to 122°F)

Storage temperature:

-20 to 70°C (-4 to 158°F)

Humidity: 0 to 90%
non-condensing



OMEGACARESM extended
warranty program is available for
models shown on this page. Ask
your sales representative for full
details when placing an order.
OMEGACARESM covers parts,
labor and equivalent loaners.

To Order	
Model No.	Description
PCI-PDISO16	16-channel PCI-bus compatible high voltage (AC or DC) input board with 16 electromechanical relays
PCI-PDISO8	8-channel PCI-bus compatible high voltage (AC or DC) input board with 8 electromechanical relays
CIO-MINI50	50-pin screw terminal board (for PCI-PDISO16)
C50FF-2	50-pin ribbon cable, 0.6 m (2') long (for PCI-PDISO16)
CIO-MINI37	37-pin screw terminal board (for PCI-PDISO8)
C37FF-2	37-pin ribbon cable, 0.6 m (2') long (for PCI-PDISO8)

Comes complete with InstaCal installation, calibration and test utility, Universal Library (programming libraries for Windows XP SP2/Vista/7), LabVIEW drivers and operator's manual on CD.

Ordering Example: PCI-PDISO16 card, CIO-MINI50 screw terminal panel, C50FF-2 cable, and OCW-1 OMEGACARESM 1-year extended warranty for PCI-PDISO16 (adds 1 year to standard 3-year warranty).