

CPCI-PDISO16 & CPCI-PDISO8

16 and 8 Channel, CompactPCI-bus Compatible, High Voltage, High Current Digital I/O Boards



Features

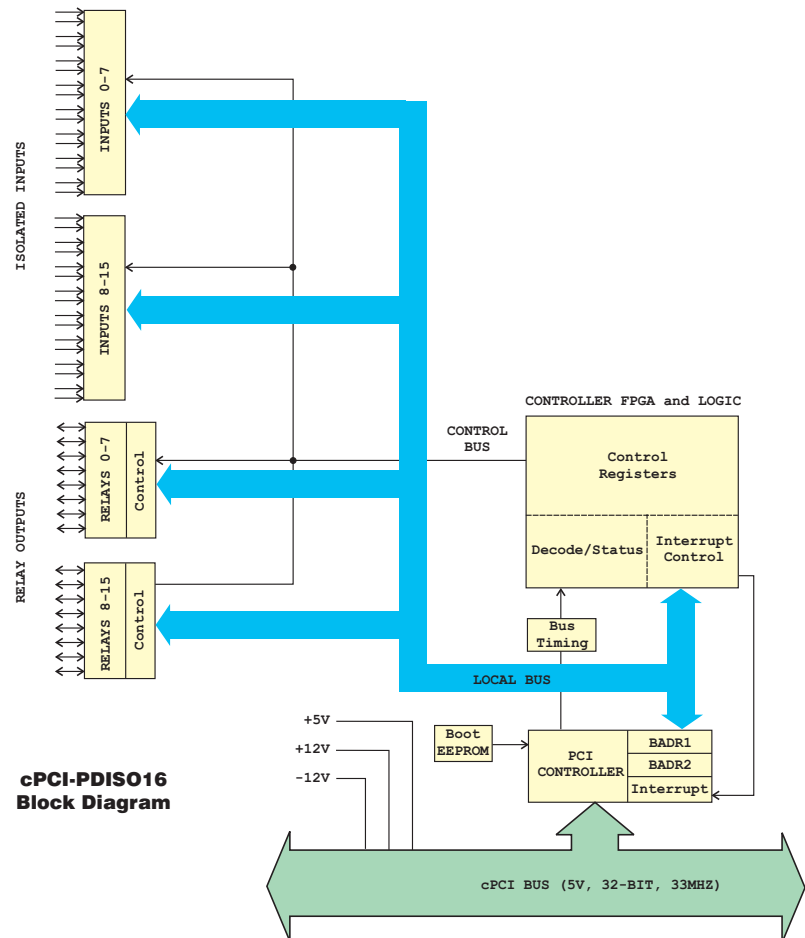
CPCI-PDISO16

- 16 high voltage (5V-28V) ac/dc digital input channels
- 16 form C electromechanical relays
- 3 Amp, 120 Vac output control
- Register & Connector compatible with CIO-PDISO16

CPCI-PDISO8

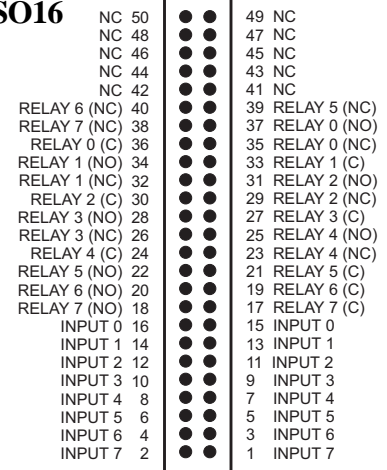
- 8 high voltage (5V-28V) ac/dc digital input channels
- 5 form C, 3 form A (NO) relays
- 3 Amp, 120 Vac output control
- Register & Connector compatible with CIO-PDISO8

Block Diagram

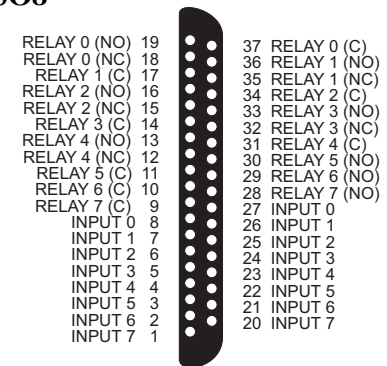


Connector Diagrams

CPCI-PDISO16

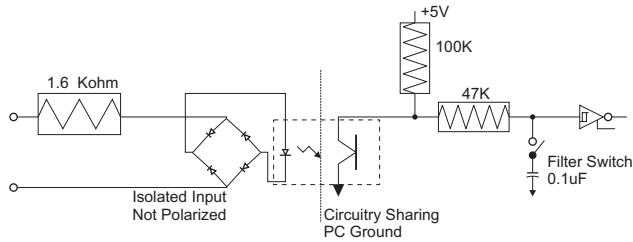


CPCI-PDISO8



Functional Description

The CPCI-PDISO16 and CPCI-PDISO8 combine isolated AC or DC inputs and electromechanical relays on a single CompactPCI-bus compatible board. The CPCI-PDISO16 provides sixteen 24 Vac or dc inputs and 16 form C, 3 Amp relays. The CPCI-PDISO8 offers eight 24 Vac or dc and eight 3 Amp relay outputs (5 form C, 3 form A). A software enabled input filter is available on all channels. A schematic diagram of one of the input channels is shown below.



The boards are fully connector compatible with their ISA counterparts (CIO-PDISO16 & 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 computers plug-and-play software.

Specifications

Relay Specifications

Contact Configuration	
CPCI-PDISO16	16 form C
CPCI-PDISO8	5 form C, 3 form A (NO)
Contact Rating	3A @ 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 1.5mm)
Dielectric Isolation	500 V (1 minute)
Life Expectancy	10 million mechanical operations, min

Isolated Inputs

CPCI-PDISO16	16
CPCI-PDISO8	8
DC input ranges	
Vin low	1.8 V, max
Vin high	5 V, min
AC input ranges (50-1000Hz)	
Vin low	1.8 Vp-p, max
Vin high	5.0 Vp-p, min
Max input voltage	28 Vdc, or 28VRMS (50-1000 Hz)
Isolation	500V
Resistance	1.6 kilohms min
Response w/o filter	20 uS (without filter)
	5 mS (with filter)
Filter Control	Individually programmable, Filters disabled on power-up/reset

Power consumption (+5V)

CPCI-PDISO16	0.7 A, all relays OFF
	2.0 A, all relays ON
CPCI-PDISO8	0.4 A, all relays OFF
	1.0 A, all relays ON

Environmental

Operating / storage temp	0 to 50 °C / -20 to 70 °C
Humidity	0 to 90% non-condensing

Software

The CPCI-PDISO series boards come complete with ComputerBoards' powerful *InstaCal*™ software package. *InstaCal* is a complete installation, calibration and test program for ComputerBoards data acquisition boards. Complete with extensive error checking, *InstaCal* guides you through installation and setup of your data acquisition board and creates the board configuration file for use by your program or application software package. *InstaCal* is described in the software section of this website.

The boards are fully supported by ComputerBoards' powerful Universal Library. Universal Library is a complete set of I/O libraries and drivers for all of our boards, for all Windows based languages. When using the Universal Library you can switch boards or even programming languages and the syntax remains constant. Universal Library is fully described in the software section of this website.

The CPCI-PDISO series boards are fully supported by a wide variety of applications software packages including SoftWIRE™, DAS-Wizard™, (and DAS-WizardPro™), HP VEE®, HP VEE Lab and LabVIEW™. For further details on these, as well as a variety of other software packages, please refer to the software section provided of this website.



SoftWIRE for Visual Basic combines the simplicity of graphical programming with the power and flexibility of programming in VB!

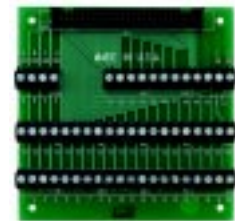
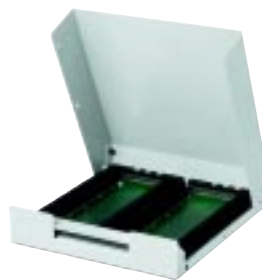
Ordering Guide

CPCI-PDISO16

16 channel cPCI bus compatible high voltage (AC or DC) input board with 16 electromechanical relays.

CPCI-PDISO8

8 channel cPCI bus compatible high voltage (AC or DC) input board with 8 electromechanical relays.



Screw Terminal Boards The CPCI-PDISO16 board is compatible with the SCB-50 screw connection box or the CIO-MIN50 via CFF50-xx series cables. The CPCI-PDISO8 is compatible with the SCB-27 screw connection box or the CIO-MINI37 screw terminal board via C37FF-xx cables. *ComputerBoards 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.*