

PCI-7260

8-CH High-Power Relay Outputs & 8-CH Isolated Digital Inputs Card

Features

- Supports a 32-bit 3.3V or 5V PCI bus
- 8-CH high power relay outputs
 - 5A at 250V_{AC}
 - 5A at 30V_{DC}
- 8-CH isolated digital inputs
- 8-CH relay status outputs
- 1-CH emergency shutdown input
- Pluggable connector for high current input
- On-board LED indicators for relay status
- Initial and safety state setting by DIP switches
- Interrupt generated from
 - COS (Change of State) of DI
 - CH0/CH1 rising edge
- Built-in watchdog timer

Operating Systems

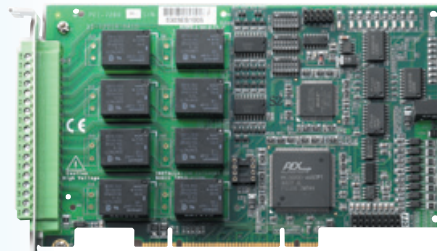
- Windows 98/NT/2000/XP/2003
- Linux
- DOS

Recommended Software

- VB/VC++/BCB/Delphi
- DAQBench

Driver Support

- DAQ-LVIEW PnP for LabVIEW
- DAQ-MTLB for MATLAB
- DAQBOY for Windows
- PCIS-DASK for Windows
- PCIS-DASK/X for Linux



Introduction

ADLINK PCI-7260 is the world's first PCI-bus, high-power relay output card for industrial automation and machine control. The design of PCI-7260 conforms to EN61010-1 safety standard. All eight channels are capable to switch 5A current at 250V_{AC} or 5A current at 30V_{DC}. Its pluggable front-panel connector gives consideration to both carrying high current and easy wiring. The PCI-7260 also provides eight isolated digital input channels with debouncer capability. Users may monitor the digital inputs by handling the hardware interrupt generated when DI status changes or DI CH0/CH1 transitions from low to high.

PCI-7260 also provides advanced features to make it feasible for industrial applications. The emergency shutdown input on the front panel lets users get back to a safety state set by a DIP switch regardless the system condition. The initial output status when powering on can be also set by a DIP switch. A built-in watchdog timer guarantees you that all the relays go back to the safety state when your compute halts.

Specifications

Relay Output

- Number of channels: 8
- Relay type: Non-latching SPST-NO + SPST-NC (for output indicator)
- Contact rating
 - AC: 250V @ 5A
 - DC: 30V @ 5A
- Insulation resistance: 1000MΩ min. (at 500V_{DC})
- Breakdown voltage: 2000V_{AC}, 50/60Hz for 1 minute
- Contact resistance: 30mΩ max
- Operate time: 10ms max.
- Release time: 10ms max.
- LED indicators: on-board LEDs for relay status
- Expected relay life
 - > 10⁵ operations @ 5A, 250V_{AC}/30V_{DC}
- Data transfer: programmed I/O

Isolated Digital Input

- Number of channels: 8
- Input current
 - Rated current: 10mA
 - Max current: 50mA, for isolated input.
- Input voltage: Up to 24 V_{DC}
 - Input high voltage: 10-24V
 - Input low voltage: 0-2V
- Input resistance: 4.7KΩ @ 0.5V
- Input mode: AC-filter/ Non-AC-filter

- Isolation voltage: 2,500 V_{RMS} channel-to-system
- Interrupt sources
 - Change-of-state (COS)
 - CH0/CH1 rising edge
- Data transfer: programmed I/O

Isolation +5V Power Supply

- Output Voltage: +5V
- Output Current: 170mA max. (@ 40°C)

Relay Status Output

- Number of channels: 8
- Driving capacity: 15mA

General Specifications

- I/O connector
 - 18-pin pluggable terminal block connector
 - 20-pin ribbon male x2
- Operating temperature: 0 to 60°C
- Storage temperature: -20°C to 70°C
- Relative humidity: 35% to 85%, noncondensing
- Power requirements

+5 V	
510mA typical	990mA
(when all relays are activated simultaneously)	

- Dimensions (not including connectors)
175mm x 107mm

Certificate

- EMC/EML: CE, FCC Class A
- Safety: EN61010: 2001

Pin Assignment

CN1: Relay Output/ Emergency Shutdown Input

1	NO0
2	COM0
3	NO1
4	COM1
5	NO2
6	COM2
7	NO3
8	COM3
9	NO4
10	COM4
11	NO5
12	COM5
13	NO6
14	COM6
15	NO7
16	COM7
17	ESDN_SHDN+
18	ESDN_SHDN-

JP2: Digital Input

DI 0+	1	2	DI 0-
DI 1+	3	4	DI 1-
DI 2+	5	6	DI 2-
DI 3+	7	8	DI 3-
DI 4+	9	10	DI 4-
DI 5+	11	12	DI 5-
DI 6+	13	14	DI 6-
DI 7+	15	16	DI 7-
ISO5V	17	18	ISO5V
ISO5V	19	20	ISO5V

JP3: External LED

LED0-	1	2	LED0+
LED1-	3	4	LED1+
LED2-	5	6	LED2+
LED3-	7	8	LED3+
LED4-	9	10	LED4+
LED5-	11	12	LED5+
LED6-	13	14	LED6+
LED7-	15	16	LED7+
X	17	18	X
X	19	20	X

Ordering Information

- **PCI-7260**
8-CH High-Power Relay Outputs & 8-CH Isolated Digital Inputs Card
- **ACL-10337 (for JP2/JP3)**
Two 20-Pin Header to 37-Pin D-Sub PC Back Panel

1 Software Solutions

2 PXI/ CompactPCI Platforms

3 PXI-Based Instruments

4 PXI/ CompactPCI Modules

5 PCI DAQ Cards

6 PCI DIO Cards

7 PC/ 104-Plus Products

8 ISA DAS/ DIO Cards

9 Wiring Termination Boards

10 Motion Vision & COM

11 Remote I/O Modules

12 Industrial Computers