

PCI-7260

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

Features

- Supports universal 32-bit 3.3V and 5V PCI bus
- 8-CH high power relay outputs
 - 5A at 250VAC
 - 5A at 30VDC
- 8-CH isolated digital inputs
- 8-CH relay status outputs
- 1-CH emergent stop input
- Pluggable connector for high current input
- On-board LEDs for relay status display
- Initial and safety state setting by DIP switches
- Interrupt generated from
 - COS (Change of State)
 - CH0 & CH1 positive edge
- Built-in watchdog timer
- **Operating Systems**
 - Windows 98/2000/NT/XP
 - Linux
- **Recommended Software**
 - VB/VC++/BCB/Delphi
- **Driver Support**
 - PCIS-DASK for Windows 98/NT/2000/XP
 - PCIS-DASK/X for Linux
 - DAQ-LVIEW PnP for LabVIEW



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 250VAC or 5A current at 30VDC. 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 CH0 & CH1 transitions from low to high.

PCI-7260 also provides advanced features to make it feasible for industrial applications. The emergent stop 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)
- Contacting rating
 - AC: 250V @ 5A
 - DC: 30V @ 5A
- Insulation resistance: 1000MΩ min. (at 500V DC)
- Breakdown voltage: 2000VAC, 50/60Hz for 1 minute
- Contact resistance: 30mΩ max
- Operate time: 10ms max.
- Release time: 10ms max.
- Relay LED indicators:
 - On-board LEDs for relay status
 - On-board relay status outputs for external indication
- Expected contact life under rated load:
 - Mechanical: 50,000,000 operations min.
 - Electrical: 10,000 operations min.
- 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 VDC
 - Input high voltage: 5-24V
 - Input low voltage: 0-2V
- Input resistance: 4.7KΩ
- Input mode: Isolation AC-filter/ Non-AC-filter

- Isolation voltage: 2,500 Vrms channel-to-system
- Interrupt sources
 - Change-of-state (COS)
 - CH0 & CH1 positive 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 Specification

- 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 the connector): 175mm x 107mm

Certificate

- EMC/EMI: CE, FCC Class A

Pin Assignment

CN1: Relay Output/ Emergency Stop 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+
ISO GND	17	18	ISO GND
ISO 5V	19	20	ISO 5V

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**
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