ACL-7125
8-CH Relay Outputs & 8-CH Isolated DI Card

Features
- PC AT bus
- 4-CH SPDT (Form C) and 4-CH SPST (Form A) relays
- Nonlatching relays
- On-board LED indicators for relay status
- On-board relay driving circuits
- Relay output status read back
- 8-CH isolated digital inputs
- On-board low-pass filtering for digital inputs
- Register compatible with ACL-725/PCL-725

- **Operating Systems**
  - Windows 2000/NT/XP/9x
  - DOS

- **Recommended Software**
  - VB/VC++/BCB/Delphi
  - Turbo C/Borland C

- **Driver Support**
  - ACLS-LVIEW
  - ACLS-DLL/DLL2
  - DOS library

Introduction
ADLINK ACL-7125 provides 8-CH relay outputs and 8-CH isolated digital inputs. Four of the relays are SPDT (Form C) and four are SPST (Form A), which are suitable for device connection with ON/OFF control. The status of each relay output is represented by an on-board LED. When the relay is energized, its corresponding LED will turn ON, otherwise it is OFF. All of the digital input channels are non-polarity and optically isolated. Users can set for each digital input by using RC filter or not. The device is suitable for collecting digital inputs in noisy environments.

Specifications

Relay Output
- Number of channels: 8
- Relay types
  - Channel 0-3: SPDT (Form C)
  - Channel 4-7: SPST (Form A)
- Contact rating
  - AC: 120 V @ 0.5 A
  - DC: 24 V @ 1 A
- Breakdown voltage: 1000 V_{RMS}
- Contact resistance: 100 mΩ
- Relay ON/OFF time
  - Operate time: 5 ms
  - Release time: 5 ms
- LED indicators: on-board LEDs for relay status
- Expected life
  - >5x10^5 operations @ 1 A, 24 V_{DC}
  - >2x10^5 operations @ 0.5 A, 120 V_{AC}
- Data transfer: programmed I/O

Isolated Digital Input
- Number of channels: 8
- Maximum input range: 24 V, non-polarity
- Digital logic levels
  - 0-24 V, non-polarity
    - Input high voltage: 5-24 V
    - Input low voltage: 0-1.5 V
- Input resistance: 1.2 kΩ @ 0.5 W
- Isolation voltage: 1000 V_{RMS}
- Data transfers: programmed I/O

General Specifications
- I/O connector: 37-pin D-sub female
- Operating temperature: 0 to 55 ˚C
- Storage temperature: -20 to 80 ˚C
- Relative humidity: 5 to 95%, noncondensing
- Power requirements

+5 V	+12 V
130 mA typical	180 mA When all relays are actived simultaneously

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

Termination Boards
- **DIN-37D**
  Termination Board with a 37-pin D-sub Connector and DIN-Rail Mounting (Including One 1-meter ACL-10137 Cable)

- **ACLD-9137**
  General-Purpose Termination Board with a 37-pin D-sub Male Connector

- **ACLD-9138**
  General-Purpose Termination Board with a 37-pin D-sub Connector (Including One 1-meter ACL-10237 Cable)

Pin Assignment

NO0	1	20	NO3
COM0	2	21	COM3
NC0	3	22	NC3
NO1	4	23	NO4
COM1	5	24	COM4
NC1	6	25	NO5
NO2	7	26	COM5
COM2	8	27	NO6
NC2	9	28	COM6
NO7	10	29	N/C
COM7	11	30	DICOM0
DI0	12	31	DICOM1
DI1	13	32	DICOM2
DI2	14	33	DICOM3
DI3	15	34	DICOM4
DI4	16	35	DICOM5
DI5	17	36	DICOM6
DI6	18	37	DICOM7
DI7	19		

Ordering Information
- **ACL-7125**
  8-CH Relay Outputs & 8-CH Isolated DI Card

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 Control Cards
11 Machine Vision Products
12 Remote I/O Modules