

# 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<sub>RMS</sub>
- 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<sup>5</sup> operations @ 1 A, 24 V<sub>DC</sub>
  - >2x10<sup>5</sup> operations @ 0.5 A, 120 V<sub>AC</sub>
- 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<sub>RMS</sub>
- 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
D10	12	31	DICOM1
D11	13	32	DICOM2
D12	14	33	DICOM3
D13	15	34	DICOM4
D14	16	35	DICOM5
D15	17	36	DICOM6
D16	18	37	DICOM7
D17	19		

### Ordering Information

- **ACL-7125**  
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