

# ACL-7225

## 16-CH Relay Outputs & 16-CH Isolated DI Card

### Features

- PC AT bus
- 8-CH SPDT (Form C) & 8-CH SPST (Form A) relays
- Nonlatching relays
- On-board LED indicators for relay status
- On-board relay driving circuits
- Relay output status read back
- 16-CH isolated digital inputs
- On-board low-pass filtering for digital inputs
- **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-7225 provides 16-CH relay outputs and 16-CH isolated digital inputs. Eight of the relays are SPDT (Form C) and eight 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: 16
- Relay types
  - Channel 0-3 and 8-11: SPDT (Form C)
  - Channel 5-7 and 12-15: 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: 16
- 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 Specification

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

+5 V	+12 V
310 mA typical	180 mA
When all relays are activated simultaneously	

- Dimensions (not including connectors)  
177 mm x 122 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)

### Ordering Information

- **ACL-7225**  
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### Pin Assignment

CN1			
NO8	1	2	COM8
NC8	3	4	NO9
COM9	5	6	NC9
NO10	7	8	COM10
NC10	9	10	NO11
COM11	11	12	NC11
NO12	13	14	COM12
NC12	15	16	NO13
COM13	17	18	NO14
COM14	19	20	NO15
COM15	21	22	DICOM8
DI8	23	24	DICOM9
DI9	25	26	DICOM10
DI10	27	28	DICOM11
DI11	29	30	DICOM12
DI12	31	32	DICOM13
DI13	33	34	DICOM14
DI14	35	36	DICOM15
DI15	37	38	N/C
N/C	39	40	N/C

CN2			
NO0	1	20	COM0
NC0	2	21	NO1
COM1	3	22	NC1
NO2	4	23	COM2
NC2	5	24	NO3
COM3	6	25	NC3
NO4	7	26	COM4
NC4	8	27	NO5
COM5	9	28	NO6
COM6	10	29	NO7
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		