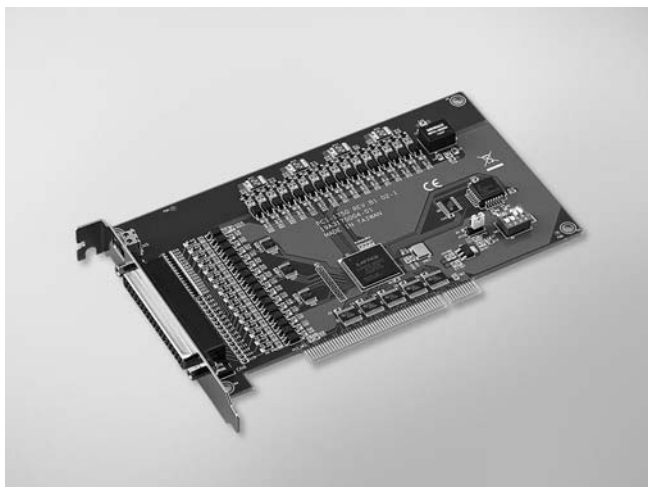


# PCI-1750/1750SO

## 32-ch Isolated Digital I/O and 1-ch Counter PCI Card



FCC CE RoHS COMPLIANT

### Features

- 16 isolated DI and 16 isolated DO channels
- High voltage isolation on all isolated channels (2,500 V<sub>DC</sub>)
- High source current on isolated output channels (200 mA/channel)
- Supports dry contact or 5 ~ 50 V<sub>DC</sub> isolated inputs
- Interrupt handling capability
- Timer/counter interrupt capability

### Introduction

PCI-1750/1750SO offers 16 isolated digital input channels, 16 isolated digital output channels, and one isolated counter/timer for the PCI bus. With isolation protection of 2,500 V<sub>DC</sub>, and dry contact support, PCI-1750/1750SO is ideal for industrial applications where high-voltage protection is required. Each I/O channel of the PCI-1750/1750SO corresponds to a bit in a PC I/O port. This makes PCI-1750/1750SO very easy to program. This card also offers a counter or timer interrupt and two digital input interrupt lines to a PC, so you can then easily configure the card with software.

### Specifications

#### Isolated Digital Input

- **Channels** 16
- **Input Voltage** Logic 0: 2 V max.  
Logic 1: 5 V min. (50 V<sub>DC</sub> max.) or dry contact
- **Interrupt Capable Ch.** 2
- **Isolation Protection** 2,500 V<sub>DC</sub>
- **Opto-Isolator Response** 100 μs

#### Isolated Digital Output

- **Channels** 16
- **Sink Current** 200mA max. / channel (PCI-1750 NPN type)
- **Source Current** 200mA max. / channel (PCI-1750SO PNP type)
- **Isolation Protection** 2,500 V<sub>DC</sub>
- **Output Voltage** 5 ~ 40 V<sub>DC</sub>
- **Source Current** 200 mA max. per channel
- **Opto-Isolator Response** 100 μs
- **Sufficient Withstanding current** 1.6A max. per PCOM
- **Over current ground** CN5 (wiring necessary if totally current over 1.6A)

#### Counter/Timer

- **Channels** 1
- **Resolution** 1 x 16-bit isolated counter
- **Input Voltage** Logic 0: 2V max.  
Logic 1: 5V min. (50V<sub>DC</sub> max.)
- **Max. Input Frequency** 1 MHz
- **Isolation Protection** 2,500 V<sub>DC</sub>

#### General

- **Bus Type PCI** V2.2
- **I/O Connectors** 1 x DB37 female connector  
1 x 2-pin terminal block for extended ground
- **Dimensions (L x H)** 175 x 100 mm (6.9" x 3.9")
- **Power Consumption** Typical: 5 V @ 850 mA  
Max.: 5 V @ 1.0 A

- **Operating Temperature** 0 ~ 70°C (32 ~ 158°F)
- **Storage Temperature** -20 ~ 80°C (-4 ~ 176°F)
- **Storage Humidity** 5 ~ 95% RH, non-condensing

### Ordering Information

- **PCI-1750** 32-ch Isolated Digital I/O (NPN DO) and Counter PCI Card
- **PCI-1750SO** 32-ch Isolated Digital I/O (PNP DO) and Counter PCI Card

#### Accessories

- **PCL-10137-1E** DB37 Cable, 1 m
- **PCL-10137-2E** DB37 Cable, 2 m
- **PCL-10137-3E** DB37 Cable, 3 m
- **ADAM-3937** DB37 DIN-rail Wiring Board

### Pin Assignments

INT0 / IDI 0	1	20	IDI 1
IDI 2	2	21	IDI 3
INT0_G / IDI 4	3	22	IDI 5
IDI 6	4	23	IDI 7
INT1 / IDI 8	5	24	IDI 9
IDI 10	6	25	IDI 11
INT1_G / IDI 12	7	26	IDI 13
IDI 14	8	27	IDI 15/Counter2
IGND	9	28	IGND
COM1	10	29	IGND
IDO 0	11	30	IDO 1
IDO 2	12	31	IDO 3
IDO 4	13	32	IDO 5
IDO 6	14	33	IDO 7
IDO 8	15	34	IDO 9
IDO 10	16	35	IDO 11
IDO 12	17	36	IDO 13
IDO 14	18	37	IDO 15
COM2	19		