

## PCI Relay Output Board

# PCI-P16POR16

16-channel isolated digital input & 16-channel PhotoMOS relay output board



### Features

- 32-bit +5V PCI Bus , Plug & Play
- 16-channel PhotoMOS relay output
- 16-channel optical isolated digital input
- AC/DC signal input
- AC signal input with filter
- On-board LED indication for output status

### Functional Description

The PCI-P16POR16 provides 16-channel optically isolated input and 16-channel PhotoMOS relay output. The PCI-P16POR16 has one 37-pin D-Sub connector and one 40-pin header. The 40-pin to DB-37 flat-cable can be fixed on the case wall.

### Applications

- Factory automation
- Laboratory automation
- Communication switching
- Industrial automation

### Specifications

#### 16 Isolated Digital Input

- Type: non-polarized OPTO-Isolated
- Isolated voltage: 5000V
- Photo-coupler: PC-814
- Input current: 20 mA max (24V)
- Input voltage: AC/DC 5-24V (AC 50~1KHz)
- Input impedance: 1.2K $\Omega$  / 1W
- Withstanding voltage: 1KV
- Response time: 20  $\mu$  S (without filter)  
2.2mS (with filter)

#### 16 Isolated Digital Output

- Type: PhotoMOS relay
- Turn on time: Ton =0.7ms (typical)
- Turn off time: Toff=0.05ms (typical)
- Output: on resistance =23 $\Omega$  (typical)
- Load voltage: 350V (Peak AC)
- Continuous load current: 0.13A
- Peak load current: 0.3A
- Maximun switching power: 300mW
- Output off-state leadage current: 1  $\mu$  A max
- Input/Output isolation: 5000 V (AC Switching)

### General Specifications

- I/O connector: one 37-pin D-sub and one 40-pin header
- Power requirements: +5V@320 mA
- Operating temperature: 0 ~ 60°C
- Operating humidity: 0 ~ 90% non-condensing
- Storage temperature: -20 ~ 80°C
- Dimensions: 180 mm x 105 mm

### Pin Assignment

NO_0	1	○	20	COM_0
NO_1	2	○	21	COM_1
NO_2	3	○	22	COM_2
NO_3	4	○	23	COM_3
NO_4	5	○	24	COM_4
NO_5	6	○	25	COM_5
NC_6	7	○	26	COM_6
NO_7	8	○	27	COM_7
	9	○	28	
	10	○	29	GND
	11	○	30	DIL_0
DIH_0	12	○	31	DIL_1
DIH_1	13	○	32	DIL_2
DIH_2	14	○	33	DIL_3
DIH_3	15	○	34	DIL_4
DIH_4	16	○	35	DIL_5
DIH_5	17	○	36	DIL_6
DIH_6	18	○	37	DIL_7
DIH_7	19	○		

### Ordering Information

#### Standard

**PCI-P16POR16:** 16-channel isolated digital input & 16-channel PhotoMOS output board

#### Optional

**DN-37:** DIN-rail mounting terminal board  
**DB-37:** Direct connection terminal board