ISA Relay Output Board

P8R8DIO/P16R16DIO

8/16-channel isolated digital input & 8/16-channel relay output board



P8R8DIO

P16R16DIO



Functional Description

The P8R8DIO is an 8-channel isolated digital input and 8 channel relay output interface board designed for control and sensing applications. This board is easily installed in any PC/AT/XT or compatible computer. The P8R8DIO can be used in various applications including load switching, external switching, contact closure and others. The P16R16DIO has one 37-pin D-Sub female and one 40-pin header. It can replace two P8R8DIO.

Applications

- Factory Automation
- Product Test
- Laboratory Automation
- Security Control

Specifications

Relay Output

- Relay output channels: 8(P8R8DIO); 16(P16R16DIO)
- Contact rating: 125VAC@0.5A; 30VDC@1A
- Output type: channel 0~3 and 8~11: SPDT(Form C)
 channel 4~7 and 12~15: SPST(Form A)
- Breakdown voltage: 1KV
- Operating time: 5ms
- Release time: 5ms
- Expected life > 100, 000 times (Electrical at 30V/1A)

Isolated Digital Input

- Number of channels: 8 (P8R8DIO);16(P16R16DIO)
- Type: non-polarized OPTO-Isolated
- Input voltage: AC/DC 5-24V (AC: 50 -1 K Hz)
- ullet Input impedance: 1.2 K Ω
- Response time: 20 μ S (without filter) 2.2 mS (with filter)
- Isolation voltage: 500V Channel-Channel & Channel-Ground

Features

- 8/16-channel electromagnetic relay output
- 8/16-channel optically isolated digital input
- AC/DC signal input
- AC signal input with filter
- On-board LED indication for relay status

General Specifications

- I/O connector: one 37-pin D-sub female (P8R8DIO) one 37-pin D-sub female & one of 40-pin header (P16R16DIO)
- Power requirements: (max)

Device	+5V	+12V
P8R8DIO	120 mA	180 mA
P16R16DIO	200 mA	260 mA

- Operating temperature: 0 ~ 60°C
- Operating humidity: 0 ~ 90% non-condensing
- Storage temperature: -20 ~ 70°C
- Dimensions: 145 mm x 105 mm (P8R8DIO)
 175 mm x 121 mm (P16R16DIO)

Pin Assignment

NO_0 COM_0 NC_0 NC_0 NO_1 COM_1 NC_1 NO_2 COM_2 NO_7 COM_7 DIH_0 DIH_1 DIH_2 DIH_3 DIH_4 DIH_5 DIH_5 DIH_5	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	000000000000000000000000000000000000000	20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36	NO_3 COM_3 NC_3 NO_4 COM_5 COM_5 COM_6 GND DIL_0 DIL_1 DIL_2 DIL_3 DIL_3 DIL_4 DIL_5 DIL_7

Ordering Information

Standard

P8R8DIO: 8-channel isolated digital input 8-channel relay

output board

P16R16DIO: 16-channel isolated digital input 16-channel

relay output board

Optional

DN-37: Two 37-pin connector DIN-rail mounting

terminal board

DB-37: 37-pin D-sub directly connector terminal board