



# Bridging the Gap between Real World and Computer

## DIO9201



## 32-Channel Digital I/O Card (16 DI and 16 DO Photo-Coupler Isolated)

### Features

- ▶ 16 isolated digital input and 16 isolated digital output
- ▶ High voltage isolation on all isolated channels (2500V)
- ▶ DIN rail wiring board
- ▶ Various output selection : Relay, PMOS and SSR
- ▶ No output transition during start up
- ▶ Output watchdog on board

### Introduction

The DIO9201 card offers 16 isolated digital input channels and 16 isolated digital output channels for ISA bus. All the I/O's provide good noise immunity. It can be used in industrial automation and lab automation applications. Its output circuit can drive either aux. relay with dry contact or solid-state relay (SSR) for AC110/220V. One main card can hook two wiring boards with two cables.

DII is provided for DOS, WinXP, Win7 and later or LINUX platform and sample programs come with VB source code.

### Specifications

(With Matched Wiring Board)

#### Input Section

- ▶ Input channel : 16 isolated digital input
- ▶ Rated input voltage : 24V
- ▶ ON state : 2.8Vdc(max), 4.5ma(min)
- ▶ OFF state : 8Vdc(min), 3ma(max)
- ▶ Switching speed : 2.2KHz (max) with on board debounce circuit

#### Output Section

- ▶ Output channel : 16 isolated digital output
- ▶ Output rating : 500ma(peak) @ 45Vdc (on board)
  - 3A @250Vac, 30Vdc (Relay wiring board)
  - 1A @24Vdc (PMOS wiring board)
  - 2A @240Vac (SSR wiring board)
- ▶ Switching speed : 20KHz(max) (PMOS wiring board)

#### Main Card General

- ▶ Insulation Resistance : 100M Ohm(min) at 1000Vdc
- ▶ Isolation Voltage : 2500Vac 1Min
- ▶ Connector : Two 20-pin male flat-cable connectors
- ▶ Operation Temperature : 0 °C ~ +70 °C
- ▶ Storage Temperature : -20 °C ~ +80 °C
- ▶ Operation Humidity : 5~95% RH, non-condensing
- ▶ Dimensions : 175(W)\*110(H)mm, 6.9(W)\*4.4(H)in

### Pin Assignments

#### CN1/CN2

I/P0	1	2	O/P0
I/P1	3	4	O/P1
I/P2	5	6	O/P2
I/P3	7	8	O/P3
I/P4	9	10	O/P4
I/P5	11	12	O/P5
I/P6	13	14	O/P6
I/P7	15	16	O/P7
0V	17	18	0V
EXT +24Vin	19	20	EXT +24Vin

### Applications

- ▶ Industrial ON/OFF control
- ▶ Contact closure monitoring
- ▶ Switch status sensing
- ▶ Digital I/O control
- ▶ Industrial and lab automation

### Software Support

#### ▶ PC OS Support

DOS, WinXP, Win7 and later or Linux O.S.  
Embedded XP, Win CE (at request)

#### ▶ Library

DLLs, VI library

#### ▶ Develop Software

Visual C++, Visual Basic,  
Borland C/C++ Builder, LabVIEW etc

#### ▶ Example Source Code

Visual Basic

### Ordering Information

- ▶ **DIO9201** : 32-channel Digital I/O Card for 16 DI and 16 DO Photo-coupler isolated
- ▶ **ADP9201DIN(R)** : DIN rail mounted wiring board with 16 I/O LED indicators and Relay output for 8 DI, 8DO P.79
- ▶ **ADP9201DIN(P)** : DIN rail mounted wiring board with 16 I/O LED indicators and PMOS output for 8 DI, 8DO P.79
- ▶ **ADP9201DIN(S)** : DIN rail mounted wiring board with 16 I/O LED indicators and SSR output for 8 DI, 8DO P.79
- ▶ **JS51053** : DIN rail mounted dummy wiring board for JM1/JM2 I.12
- ▶ **M23207** : 20-pin flat cable 1.5 M for CN1/CN2 I.17
- ▶ **M23209** : 20-pin flat cable 3.0 M for CN1/CN2 I.17