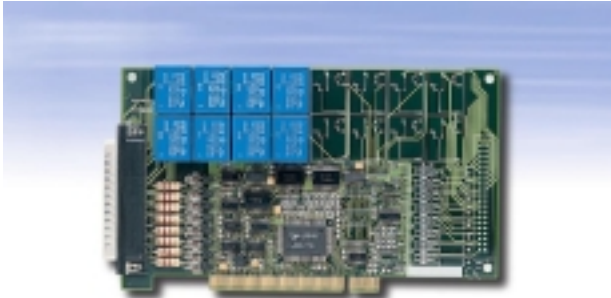




# AX5420P

## 8 Channels Iso-DI and 8 Channels Relay Output Board



### Features

- PCI bus compatible, opto-isolated digital inputs and relay actuators outputs card
- 8 channel opto-isolated digital inputs and 8 channel relay actuators outputs
- 3750Vrms channel to channel & channel-to-ground isolation
- Form A and Form C relays available for 2 and 3 A
- Furnished software diskette containing utility routines, example programs and calibration program
- Connects to a screw terminal panel available for DIO

### General Description

The AX5420P is a PCI-isolated/Relay DIO card providing 8 opto-isolated digital inputs and 8 Relay actuators outputs. The board interface allows its plugging into any PCI slot of an IBM™ PC/AT or compatible computer with PCI bus. The opto-isolated digital inputs are suitable for monitoring device ON/OFF status and alarms or sensors with discrete outputs in noisy environments. Besides monitoring DC inputs (non-polarized), the board can also be used to sense AC inputs. 8 relays are FORM C (Normally open, Normally closed and Common). The opto-isolated inputs are not polarity sensitive, and can be driven from DC or AC control voltages. Filter must be selected for setting jumper if the input is AC voltage.

The isolation voltage is guaranteed at 3750V so that common-mode voltages and voltage spikes that often occur in industrial and research environments are safely isolated from the computer with the AX5420P. You may configure the relay outputs and isolated digital Input by writing to registers. When the corresponding bit is in the low (0) state, the NC (Normally Closed) contact is connected inside the relay to the CM (Common) contact. When the corresponding bit is in high (1) state, the NO (Normally Open) contact is connected to the CM contact. All the relay contacts and isolated input lines are built in two I/O connectors which are accessible from the expansion slot rear panel of the PC.

### Specification

#### Isolated DI

- Number of Channels: 8
- Opto-isolator: PC357
- Isolation: 3750vrms Channel to Channel & Channel-to-Ground
- Input Range: 5 to 24VDC
- Input Impedance: 1.2KΩ/1W
- Response Time: 1KHz max

#### Relay Output

- Number of Relays: 8
- Relay Type: 8 Form C(SPDT),
- Contact Rating: Norminal Load 3A @ 120VAC or 24VDC
  - MAX. Switching power: 960VA, 120W
  - MAX. Switching Voltage: 250VAC, 150VDC
  - MAX. Switching Current: 3A
  - Max. Carrying Current: 3A
- Contact Material: Gold overlay silver-nickel
- Contact Resistance: 70mΩ Max.
- Insulation Resistance: 250MΩ Min. At 500VDC
- Dielectric Strength: 750VAC 1 Minute (between open contacts)  
2000VAC 1 Minute (between coil and contacts)
- Surge Strength: High voltage: 6000v (at 1.2\*50us standard surge wave)
- Operating Time: 7ms Max.

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- Release Time: 4ms Max.
- Vibration Resistance  
Unerring: 10 to 55 HZ  
Destructive: 10 to 55 HZ
- Life Expectancy  
Mechanical: 2<sup>^</sup>10 operations  
Electrical: 1<sup>^</sup>10 operations

#### **Interface Characteristic**

- I/O Connector: 37-pin male D-type connector

#### **Power Requirement**

- +5V: 200mA
- +12V: 300mA

#### **Physical/Environment**

- Dimension 185mm × 115mm
- Operating Temperature 0°C to 60°C
- Storage Temperature -25°C to 70°C
- Relative Humidity 0 to 90%, non-condensing

#### **Ordering Information**

##### **AX5420P**

8 Channels Iso-DI and 8 Channels Relay Output Board including user's manual, and utility CD-ROM with Basic, C and Pascal drivers for DOS, Windows 95/98/NT drivers, and Linux driver.

#### **Terminal Boards**

- AX851: Universal Screw Terminal Panel

#### **Drivers for 3rd party S/W packages**

- AS59061 Labtech Control and Notebook driver
- AS59011 Labview driver
- AS59130 Dasylab driver

#### ***Pin Assignment***

