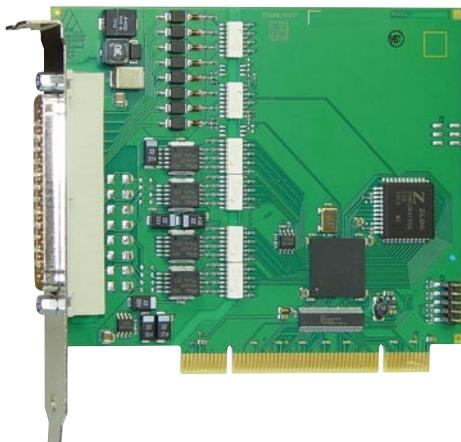


# Digital input board, optically isolated, 16 digital inputs, 24 V



## APCI-1016

16 digital inputs, 24 V

Optical isolation 1000 V

Input filters

Reverse voltage protection



PCI 32-bit



Signed 64-bit drivers  
for Windows 7/XP



LabVIEW™



LabWindows/CVI™



## Features

- 16 optically isolated digital inputs, 24 V

### Safety features

- Optical isolation 1000 V
- Creeping distance IEC 61010-1
- Reverse voltage protection
- All inputs are filtered
- Protection against fast transients (burst), overvoltage, electrostatic discharge and high-frequency EMI

## Applications

- Industrial I/O control
- Signal switching
- Interface to electromechanical relays
- Automatic test equipment
- ON/OFF monitoring of motors, lights...
- Machine interfacing
- ...

## Software drivers

A CD-ROM with the following software and programming samples is supplied with the board.

### Standard drivers for:

- Linux
- 32-bit drivers for Windows 8 / 7 / Vista / XP / 2000
- Signed 64-bit drivers for Windows 8 / 7 / XP
- Real-time use with Linux and Windows on request

### Drivers and samples for the following compilers and software packages:

- .NET
- Microsoft VC++ • Borland C++
- Visual Basic • Delphi
- LabVIEW • LabWindows/CVI • DIadem

### ADDIPACK functions:

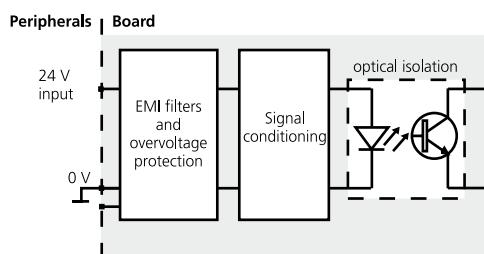
Digital input

### On request:

Further operating systems, compilers and samples.

Driver download: [www.addi-data.com/downloads](http://www.addi-data.com/downloads)

## Protective circuit for the input channels





## Specifications

### Digital inputs

Number of inputs:	16
Optical isolation:	Through opto-couplers, 1000 V from PC to peripheral
Nominal voltage:	24 V
Input current at U nominal:	6 mA typ.
Logic input levels:	U nominal: 24 V
UH max.:	30 V/current 9 mA typ.
UH min.:	19 V/current 2 mA typ.
UL max.:	14 V/current 0.7 mA typ.
UL min. at nominal voltage:	0 V/current 0 mA typ.
Signal delay:	70 µs
Maximal input frequency:	5 kHz at nominal voltage

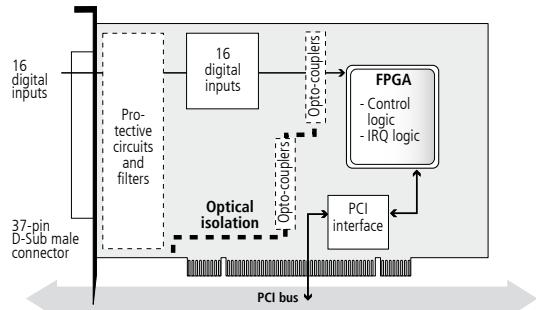
### EMC – Electromagnetic compatibility

The product complies with the European EMC directive. The tests were carried out by a certified EMC laboratory in accordance with the norm from the EN 61326 series (IEC 61326). The limit values as set out by the European EMC directive for an industrial environment are complied with. The respective EMC test report is available on request.

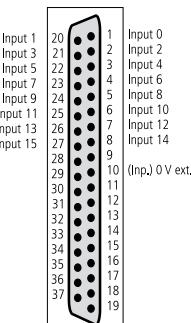
### Physical and environmental conditions

Dimensions:	131 x 99 mm (PCI short)
System bus:	PCI 32-bit 3.3/5 V acc. to specification 2.1 (PCISIG)
Space required:	1 PCI slot
Operating voltage:	+5 V, ± 5 % from the PC
Max. current consumption:	(+5 V from the PC) 190 mA ± 10 mA typ.
Front connector:	37-pin D-Sub male connector
Temperature range:	0 to 60 °C (with forced cooling)

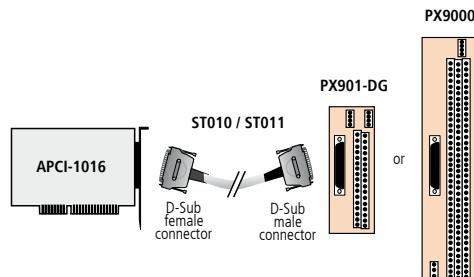
### Simplified block diagram



### Pin assignment – 37-pin D-Sub male connector



### ADDI-DATA connection



### Ordering information

#### APCI-1016

Digital input board, optically isolated, 16 digital inputs, 24 V. Incl. technical description and software drivers

#### Accessories

**PX901-D:** Screw terminal panel,  
LED status display

**PX901-DG:** Screw terminal panel,  
LED status display, for DIN rail

**PX9000:** 3-row screw terminal panel for  
DIN rail, LED status display

**ST010:** Standard round cable, shielded, twisted pairs, 2 m

**ST011:** Standard round cable, shielded, twisted pairs, 5 m