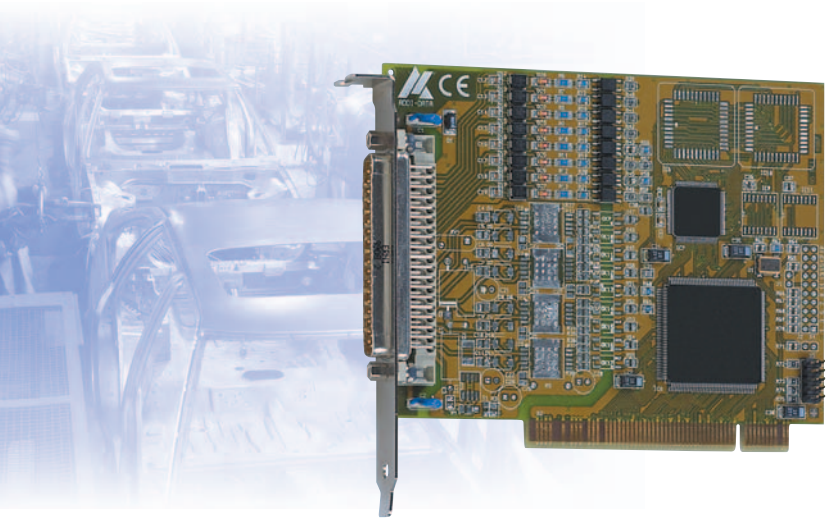
Digital input board, 16 isolated channels, 24 V



APCI-1016

16 digital inputs, 24 V

Optical isolation 1000 V

Input filter

Protection against pole reversal

LabVIEW™

LabWindows/CVI™

Features

- PCI interface to the 32-bit data bus
- 16 isolated digital inputs, 24 V

Safety features

- Optical isolation 1000 V
- Creeping distance IEC 61010-1 (VDE411-1)
- Protection against pole reversal
- All inputs are filtered
- Protection against fast transients (burst), overvoltage, electrostatic discharge and high-frequency EMI

EMC tested acc. to 89/336/EEC

- IEC 61326: electrical equipment for measurement, control and laboratory use

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 examples is supplied with the board.

Standard drivers for:
Linux kernel version 2.4.2, Windows XP/2000/NT/98.
Real-time drivers for Windows XP/2000/NT/98.
The board is delivered with the universal software ADDIPACK (see Page 5).

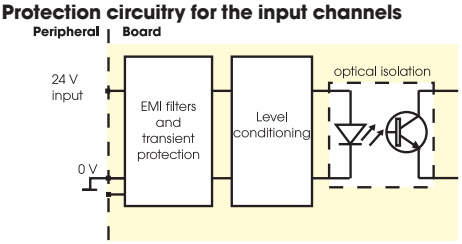
Drivers for the following application software:
LabVIEW 5.01
LabWindows/CVI

Samples for the following compilers:
Microsoft VC++ 5.0
Borland C++ 5.01
Visual Basic 5.0
Delphi 4.0

ADDIPACK functions supported:
Digital input

Current driver list on the web: www.addi-data.com

Protection circuitry for the input channels



www.addi-data.com
Sales: +49(0)7223/9493-120
Fax: +49(0)7223/9493-92

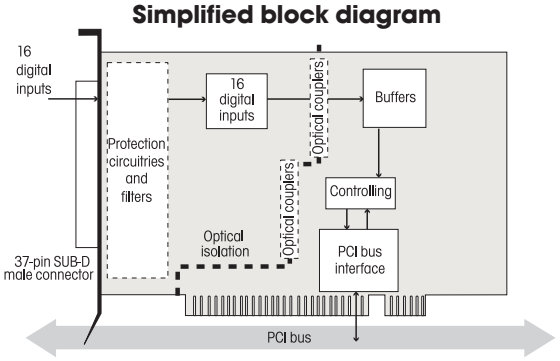
Digital input board, 16 isolated channels, 24 V

APCI-1016

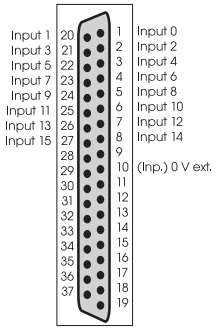
Specifications

Digital inputs	
Number of inputs:	16
Optical isolation:	through optical couplers, 1000 V from the PC to the peripheral
Nominal voltage:	24 V
Input current at 24 V:	6 mA typ.
Logical input level:	U nominal: 24 V UH max.: 30 V/Current 9 mA typ. UH min.: 19 V/Current 2 mA typ. UL max.: 17 V/Current 0.7 mA typ. UL min.: 0 V/Current 0 mA typ.
Signal delay (at 24 V):	70 µs
Maximum input frequency:	5 kHz (at 24 V)
Noise immunity	
Test level:	- ESD: 4 kV - Fields: 10 V/m - Burst: 4 kV - Conducted radio interferences: 10 V
Physical and environmental conditions	
Dimensions:	131 x 99 mm (PCI short)
System bus:	PCI 32-bit 5 V acc. to specification 2.1 (PCISIG)
Space required:	1 PCI slot
Operating voltage:	+5 V, ± 5 % from PC
Max. current consumption:	(+5 V from PC) 180 mA ± 15 mA typ.
Front connector:	37-pin SUB-D male connector
Temperature range:	0 to 60°C (with forced cooling)

Simplified block diagram

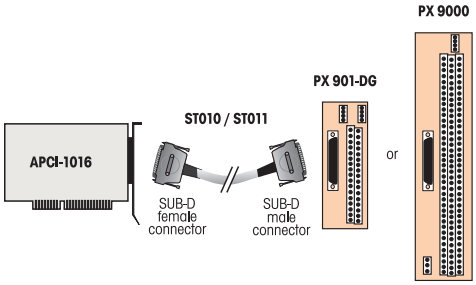


Pin assignment – 37-pin SUB-D male connector



Screw terminal board PX 901-DG with cable ST010

ADDI-DATA connection



ORDERING INFORMATION

ADDINUM APCI-1016

APCI-1016: Digital input board, 16 isolated channels, 24 V. Incl. technical description and software drivers

Connection

PX 901-D: Screw terminal board, LED status display
PX 901-DG: Screw terminal board, LED status display for DIN rail
PX 9000: 3-row screw terminal board for DIN rail, LED status display
ST010: Standard cable, shielded, twisted pairs, 2 m
ST011: Standard cable, shielded, twisted pairs, 5 m

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