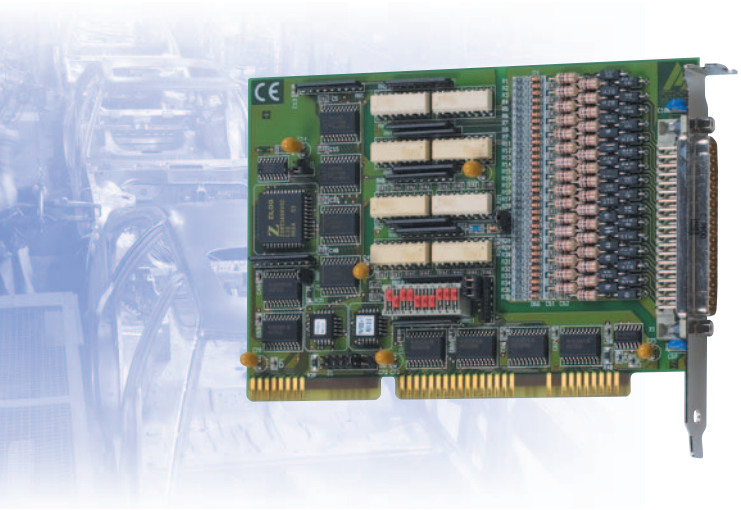
Digital input board, 32 isolated channels, 24 V



PA 1000

32 digital inputs, 24 V
incl. 14 interruptible inputs

Optical isolation 1000 V

Voltage reversal protection

Timer

LabVIEW™

LabWindows/CVI™

Features

Digital inputs

- 32 isolated input channels, 24 V, incl. 14 interruptible
- 1 channel can be dedicated to the monitoring of the 24 V supply voltage (channel 16)
- Address range adjustable through DIP switches
- 16-bit or 8-bit data bus access

Safety features

- Optical isolation 1000 V
- Creeping distance IEC 61010-1 (VDE411-1)
- Voltage reversal protection
- All inputs are filtered
- Protection against fast transients (Burst), overvoltage, electrostatic discharge and high-frequency EMI
- Additional noise suppression on the interrupt lines

EMC tested acc. to 89/336/EEC

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

Applications

- Digital monitoring
- Signal switching
- Optical isolation between PC and peripheral
- Automatic test equipment
- Equipment monitoring
- Machine interfacing
- ...

Software drivers

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

Standard drivers for:
Windows XP/2000/NT/98/95, Windows 3.11, MS-DOS
Real-time drivers for Windows XP/2000/NT

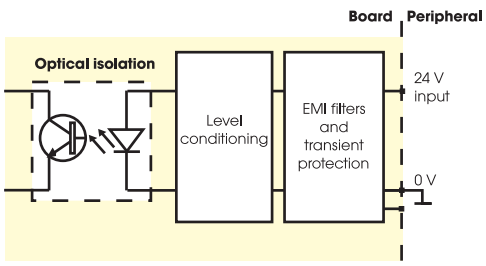
Drivers for the following application software:
LabVIEW 5.01

Samples for the following compilers:
Microsoft VC++ 5.0
Microsoft C 6.0
Borland C++ 5.01
Borland C 3.1
Visual Basic 5.0
Visual Basic 1.0
Delphi 1
Delphi 4
Turbo Pascal 7.0

On request:
Visual Basic 4.0
LabWindows/CVI 5.01

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, 32 isolated channels, 24 V

ADDI-DATA®

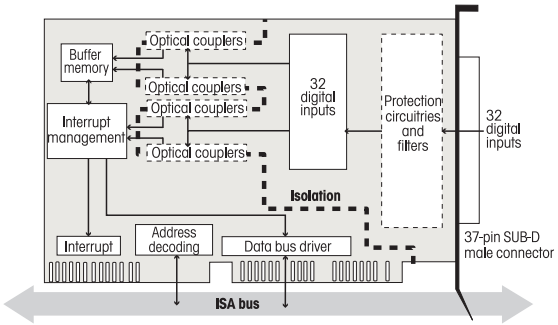
PA 1000

Specifications

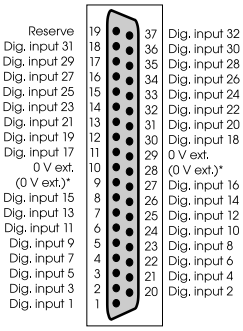
Digital inputs		
Number of inputs:	32	
Optical isolation:	through optical couplers, 1000 V from the PC to the peripheral	
Interruptible inputs:	14 of the 32 digital inputs	
Interrupt comparison logic:	AND and OR mode; OR priority	
Interrupt lines:	IRQ 3, 5 for XT IRQ 10, 11 12, 14, 15 for AT	
Nominal voltage:	24 V external	
Input current at 24 V:	6 mA typ.	
Logic input level:	U nominal:	24 V
	UH max.:	30 V/current 9 mA typ.
	UH min.:	17 V/current 2 mA typ.
	UL max.:	14 V/current 0,7 mA typ.
	UL min.:	0 V/current 0 mA typ.
Logic input level for the 24 V monitoring: (channel 16, selectable through jumper)	U nominal:	24 V
	UH max.:	30 V/current 10 mA typ.
	UH min.:	20 V/current 3 mA typ.
	UL max.:	18 V/current 1 mA typ.
	UL min.:	0 V/current 0 mA typ.
Signal delay (at 24 V):	channel 1-16: 70 µs channel 17-32: 40 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:	156 x 99 mm	
System bus:	ISA	
Place required:	1 XT or AT slot	
Operating voltage:	+5 V, ±5 % from PC	
Current consumption:	230 mA ±15 mA typ.	
Front connector:	37-pin SUB-D male connector	
Temperature range:	0 to 60 °C (with forced cooling)	

Terminal board PX 901-DG with cable ST010

Simplified block diagram

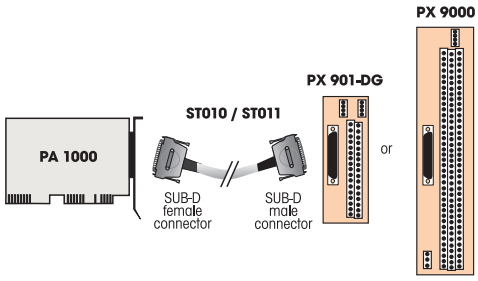


Pin assignment – 37-pin SUB-D male connector



* No signal connected at delivery, intended for current return lines

ADDI-DATA connection



ORDERING INFORMATION

ADDINUM PA 1000

PA 1000: Digital input board, 32 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 for DIN rail, LED status display

PX 9000: 3-row screw terminal board for DIN rail, LED status display

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

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

www.addi-data.com

Sales: +49(0)7223/9493-120
Fax: +49(0)7223/9493-92