

PISO-813

32-channel 12-bit 10KS/s isolated analog input board



Features

- 32-bit +5V PCI Bus, Plug & Play
- 32 single-ended analog input channels
- 12-bit A/D converter
- 3,000VDC photo-isolation protection
- Analog input range
Bipolar: +/-10V, +/-5V, +/-2.5V, +/-1.25V, +/-0.625V
Unipolar: 0~10V, 0~5V, 0~2.5V, 0~1.25V, 0~0.625V
- Programmable gain control: 1, 2, 4, 8, 16
- 3000V isolated voltage for built-in DC/DC converter
- A/D trigger mode: software trigger
- A/D data transfer mode: polling

2 PCI Bus I/O Boards

Functional Description

The PISO-813 is a bus-type isolated 12-bit A/D board with the PCI bus for IBM or compatible PC. It features a 10KHz data acquisition under DOS and Windows. The PISO-813 provides 32-channel single-ended analog input. The isolation range of PISO-813 can reach to 3000VDC. It is the most cost-effective isolated A/D board for the PCI Bus in the world.

Applications

- Data Acquisition
- Harsh Environment Operation
- Signal Isolation

Specifications

Analog Input

- Number of channels: 32 single-ended
- Resolution: 12-bit
- Sampling rate: 10KS/s max
- Input impedance: 10M Ω
- Over voltage protection: $\pm 35V$
- Accuracy: 0.01% of reading ± 1 -bit
- Linearity: ± 1 bit
- On chip sample & hold
- Zero drift: ± 25 ppm/ $^{\circ}C$ of FS max

General Specifications

- I/O connector: one 37-pin D-sub female
- Power requirements: +5V @ 860 mA
- Operating temperature: 0 ~ 60 $^{\circ}C$
- Operating humidity: 0 ~ 90 % non-condensing
- Storage temperature: -20 ~ 70 $^{\circ}C$
- Dimensions: 180 mm x 105 mm

Pin Assignment

AI_31	37	○	19	A.GND
AI_29	36	○	18	AI_30
AI_27	35	○	17	AI_28
AI_25	34	○	16	AI_26
AI_23	33	○	15	AI_24
AI_21	32	○	14	AI_22
AI_19	31	○	13	AI_20
AI_17	30	○	12	AI_18
A.GND	29	○	11	AI_16
A.GND	28	○	10	A.GND
AI_15	27	○	9	A.GND
AI_13	26	○	8	AI_14
AI_11	25	○	7	AI_12
AI_9	24	○	6	AI_10
AI_7	23	○	5	AI_8
AI_5	22	○	4	AI_6
AI_3	21	○	3	AI_4
AI_1	20	○	2	AI_2
		○	1	AI_0

Ordering Information

Standard

PISO-813: 32-channel 12-bit 10KS/s isolated analog input board

PISO-813/S: PISO-813 with DB-8325

Optional

DB-8325: Daughter board with signal conditioning circuitry

DB-37: Directly connection terminal board

DN-37: DIN-rail mounting terminal board