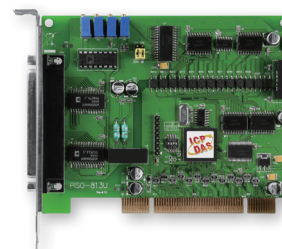## PISO-813U *NEW*

Universal PCI, 32-channel, 12-bit, 10 kS/s Isolated AD Board

CE FC RoHS

Features ▶▶▶▶

- Universal PCI (3.3 V/5 V) Interface
- 32 Single-ended Analog Input Channels
  - Bipolar Input: ±0.625 V, ±1.25 V, ±2.5 V, ±5 V, ±10 V
  - Unipolar Input: 0 ~ +0.625 V, 0 ~ +1.25 V, 0 ~ +2.5 V, 0 ~ +5 V, 0 ~ +10 V
  - Programmable Gain Control: 1, 2, 4, 8, 16
- AD Trigger: Software-trigger
- 12-bit, 10 kS/s AD Converter
- 3750 V_{rms} Bus Isolation Protection
- Built-in DC/DC Converter with 3000 V_{DC} Protection
- Supports Card ID (SMD Switch)

Introduction

The PISO-813U card is designed as an easy replacement for the PISO-813 without requiring any modification to the software or the driver.

The PISO-813U is a bus-type isolated 12-bit AD board that supports both the 3.3 V and the 5 V PCI bus and features 10 kHz data acquisitions under both DOS and Windows, and provides 32 single-ended Analog Input channels. The isolation range of the board has been increased to 3000 V, making it the most cost effective solution when considering isolated AD boards for the PCI bus.

The PISO-813U also includes an onboard Card ID that enables the board to be recognized via software if two or more PISO-813U cards are installed in the same computer.

Software

Drivers

✔ 32/64-bit Windows XP/2003/2008/Vista/7/8	✔ Linux	✔ DASYLab

Sample Programs

✔ DOS Lib and TC/BC/MSC Demo	✔ LabVIEW Toolkit
✔ VB/VC/Delphi/BCB/VB.NET/C#.NET/VC.NET/MATLAB Demo	

Hardware Specifications

Analog Input	
Isolation Voltage	3750 V_{rms} (Bus Type)
Channels	32 Single-ended
A/D Converter	12-bit, 8 μs Conversion Time
Accuracy	0.01% of FSR ±1 LSB @ 25°C, ±10 V
Sampling Rate	10 kS/s
Input Impedance	10 MΩ/6 pF
Trigger Modes	Software
Data Transfer	Polling
General	
Bus Type	3.3 V/5 V Universal PCI, 32-bit, 33 MHz
Card ID	Yes (4-bit)
Connectors	Female DB37 x 1
Power Consumption	850 mA @ +5 V
Operating Temperature	0°C to +60°C
Humidity	5 to 85% RH, Non-condensing

Pin Assignments

Pin Assignment	Terminal No.		Pin Assignment
AI_0	01		
AI_2	02	20	AI_1
AI_4	03	21	AI_3
AI_6	04	22	AI_5
AI_8	05	23	AI_7
AI_10	06	24	AI_9
AI_12	07	25	AI_11
AI_14	08	26	AI_13
A.GND	09	27	AI_15
A.GND	10	28	A.GND
AI_16	11	29	A.GND
AI_18	12	30	AI_17
AI_20	13	31	AI_19
AI_22	14	32	AI_21
AI_24	15	33	AI_23
AI_26	16	34	AI_25
AI_28	17	35	AI_27
AI_30	18	36	AI_29
A.GND	19	37	AI_31

CON1

Ordering Information

PISO-813U CR	Universal PCI, 12-bit, 10 kS/s, 32-channel Isolated Analog Input Board (RoHS). Includes one CA-4002 D-sub connector.
PISO-813U/S CR	PISO-813U CR with DB-8325 daughterboard. Includes one CA-4002 D-sub connector.