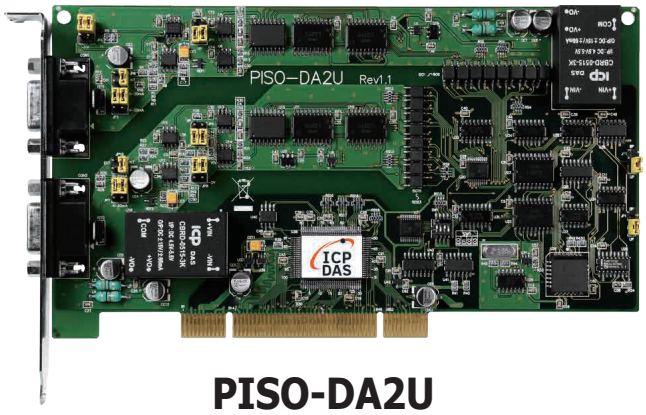


PISO-DA2U

Universal PCI, 2-ch Isolated AO Board

Features

- Universal PCI (3.3 V/5 V) Interface
- 12-bit, 2-channel Analog Output
  - 3750 VDC Bus and Channel Isolation Protection
  - 3000 VDC Power Isolation Protection
  - Unipolar or Bipolar Analog Output
  - Software Calibration
  - Two Timer-triggered Interrupt Sources
  - Calibration data stored in EEPROM
  - Double-buffered DA Latch
- Supports Card ID (SMD Switch)

Introduction

The PISO-DA2U has 2 Analog Output channels with high-voltage isolation protection and is based on the Universal PCI interface (3.3 V/5V). The PISO-DA2U is fully compatible with the PISO-DA2, and is designed as a direct replacement without requiring any modification to the software or the driver.

The built-in high-quality isolation components on the PISO-DA2U provide 3750 VDC bus-type and channel-to-channel isolation, and offer durable abilities. The voltage output range for the PISO-DA2U can be set to ±10 V, ±5 V, 0 to 10 V, or 0 to 5 V, and the current output range can be either 0 to 20 mA or 4 to 20 mA.

In addition, the PISO-DA2U also features the following innovative advantages:

1. Accurate and easy-to-use calibration:

ICP DAS provides a software calibration function rather than manual calibration so that jumpers and trim-pots are no longer required for calibration, and the calibration data can be saved in the EEPROM for long-term use.

2. Channel-to-channel configuration:

Each channel can be individually configured as either voltage or current output and can be set to a different output range.

3. Card ID:

ICP DAS has also included an onboard Card ID switch on the PISO-DA2U that enables the board to be recognized via software if two or more boards are installed in the same computer.

Pin Assignments

Pin Assignment	Terminal No.	Pin Assignment
GND	05	
GND	04	
ExtREF V Int	03	
GND	02	
V OUT	01	
	09	+15 V
	08	GND
	07	I OUT
	06	GND
		CON1

Pin Assignment	Terminal No.	Pin Assignment
GND	05	
GND	04	
ExtREF V Int	03	
GND	02	
V OUT	01	
	09	+15 V
	08	GND
	07	I OUT
	06	GND
		CON2

Software

Drivers

- [x] 32/64-bit Windows 10/11
- [x] Linux

Sample Programs

- [x] DOS Lib and TC/BC/MSC Demo
- [x] VB/VC/Delphi/VB.NET/C#.NET/VC.NET/LabVIEW/Python/MATLAB

Hardware Specifications

Hardware	
Card ID	Yes (4-bit)
Connector	Male DB9 x 2
Analog Output	
Channels	2
Range	Voltage: ±10 V, ±5 V, 0 ~ 10 V, 0 ~ 5 V Current: 0 ~ 20 mA, 4 ~ 20 mA
Resolution	12-bit
Accuracy	0.015% of FSR ±1/2 LSB @ 25 °C, ±10 V
Response Time	500 kHz
Voltage Output Capability	±5 mA
Slew Rate	0.15 V/μs
Isolation	3750 VDC (Bus Type, CH-to-CH)
Operation Mode	Static Update
PC Bus	
Type	3.3 V/5 V Universal PCI, 32-bit, 33 MHz
Data Bus	8-bit
Power	
Consumption	1350 mA @ +5 V
Mechanical	
Dimensions (mm)	98 x 189 x 22 (W x L x D)
Environment	
Operating Temperature	0 ~ +60°C
Storage Temperature	-20 ~ +70°C
Humidity	5 ~ 85% RH, Non-condensing

Applications

- High speed data acquisition system.
- Harsh environment operation.
- Signal isolation.

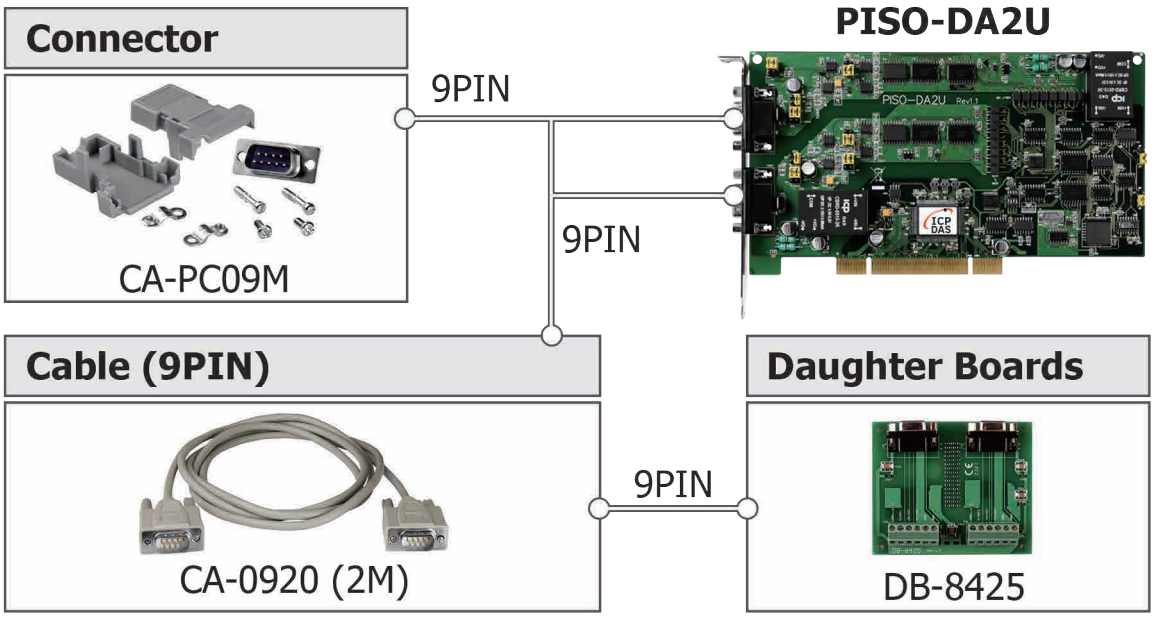
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Ordering Information

PISO-DA2U CR	Universal PCI, 2-ch Isolated AO Board (RoHS) Includes two CA-PC09M D-Sub connectors
PISO-DA2U/S CR	Universal PCI, 2-ch Isolated AO Board (RoHS)

Accessories

 CA-0920 CR	9-pin Male-Male D-sub cable, 2 M (RoHS)
 DB-8425 CR	Provided for easy wire connection with the controlled device or equipment (RoHS)



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