



Universal PCI, 2-ch Isolated Analog Output Board

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	Tei	rminal	No.	Pin Assign- ment	Pin Assignment	Te	rminal	No.	Pin Assign- ment
GND	05		09	+15 V	GND	05		09	+15 V
GND	04				GND	04			
ExtREF V Int	03		08	GND	ExtREF V Int	03		80	GND
GND	02		07	I OUT	GND	02		07	I OUT
V OUT	01		06	GND	V OUT	01		06	GND
				CON1					CON2
		V							

■ 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

CE UK FC (ROHS)

Supports Card ID (SMD Switch)

Software

Drivers ✓ 32/64-bit Windows 10/11 ✓ Linux Sample Programs ✓ DOS Lib and TC/BC/MSC Demo ✓ 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, $0 \sim 10$ V, $0 \sim 5$ V Current: $0 \sim 20$ mA, $4 \sim 20$ mA			
Resolution	12-bit			
Accuracy	0.015% of FSR $\pm 1/2$ LSB @ 25 °C, ± 10 V			
Voltage Output Capability	±5 mA			
Response Time	500 kHz			
Slew Rate	0.15 V/μs			
Isolation	3750 VDC (Bus Type, CH-to-CH)			
Operation Mode	Static Update			
PC Bus				
Туре	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)			
Environmental				
Operating Temperature	0 ~ +60°C			
Storage Temperature	-20 ~ +70°C			
Humidity	5 ~ 85% RH, Non-condensing			

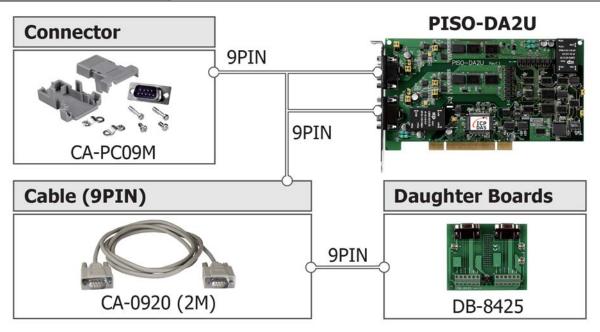
Ordering Information

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

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Accessories

CA-PC09M CR	9-pin Male D-sub connector with plastic cover (RoHS)
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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