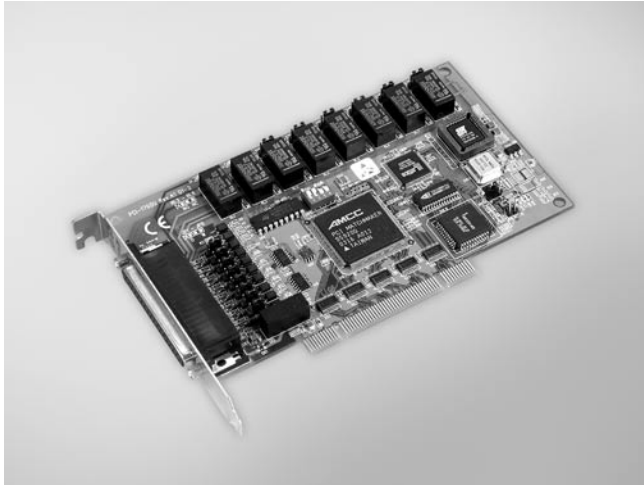


PCI-1760U

8-ch Relay and 8-ch Isolated Digital Input Universal PCI Card with 10-ch Counter/Timer



RoHS
COMPLIANT
2002/95/EC

FCC CE

Features

- Universal PCI card, for 3.3 V and 5 V PCI slot
- 8 opto-isolated digital input channels
- 8 relay actuator output channels
- 2 opto-isolated PWM outputs
- LED indicators to show activated relays
- Jumper selectable dry contact/wet contact input signals
- Up event counters for DI
- Programmable digital filter function for DI
- Pattern match interrupt function for DI
- "Change of state" interrupt function for DI
- Universal PCI and BoardID switch

Introduction

PCI-1760U relay actuator and isolated digital input card is a PC add-on card for the PCI bus. It meets the PCI standard Rev. 2.2 (Universal PCI expansion card), and works with both 3.3 V and 5 V PCI slots. It provides 8 opto-isolated digital inputs with isolation protection of 2,500 V_{DC} for collecting digital inputs in noisy environments, 8 relay actuators that can be used as a on/off control devices or small power switches, and 2 isolated PWM (Pulse Width Modulation) outputs for custom applications.

For easy monitoring, each relay is equipped with one red LED to show its on/off status. Each isolated input supports both dry contact and wet contact so that it can easily interface with other devices when no voltage is present in the external circuit.

Specifications

Isolated Digital Input

- **Channels** 8 (Sink)
- **Input Voltage** Logic 0: 1.0 V max.
Logic 1: 4.5 V min. (12 V max.)
- **Interrupt Capable Ch.** 8 (ID10 ~ ID17)
- **Isolation Protection** 2,500 V_{DC}
- **Opto-Isolator Response** 25 μ s
- **Input Resistance** 2 k Ω 1/4 W

Counter/Timer

- **Channels** 8
- **Resolution** 16 bits
- **Compatibility** 5 V/TTL
- **Max. Input Frequency** 500 Hz
- **Isolation Protection** 2,500 V_{DC}
- **PWM Channels** 2
- **Digital Noise Filter** Min. effective high input period $\geq [(2 \sim 65535) \times 5 \text{ ms}] + 5 \text{ ms}$
Min. effective low input period $\geq [(2 \sim 65535) \times 5 \text{ ms}] + 5 \text{ ms}$

Relay Output

- **Channels** 8
- **Relay Type** 2 x Form C, and 6 x Form A
- **Contact Rating** 120 V_{DC} @ 0.5 A, or 30 V_{DC} @ 1 A
- **Relay on Time** 5 ms max.
- **Relay off Time** 5 ms max.
- **Life Span** 200,000 operations @ 0.5 A 120 V_{AC}
500,000 operations @ 1.0 A 30 V_{DC}
- **Resistance** Contact: < 100 m Ω
Insulation: 50 M Ω

General

- **Bus Type** Universal PCI V2.2
- **I/O Connectors** 1 x DB37 female connector
- **Dimensions (L x H)** 175 x 100 mm (6.9" x 3.9")
- **Power Consumption** Typical: +5 V @ 450 mA
Max: +5 V @ 850 mA
- **Operating Temperature** 0 ~ 60° C (32 ~ 140° F) (IEC 68 - 2 - 1, 2)
- **Storage Temperature** -20 ~ 70° C (-4 ~ 158° F)
- **Storage Humidity** 5 ~ 95 % RH, non-condensing (IEC 68-2-3)

Ordering Information

- **PCI-1760U** 8-ch Relay/DI PCI Card w/ 10-ch Counter/Timer
- **PCL-10137-1** DB37 Cable, 1 m
- **PCL-10137-2** DB37 Cable, 2 m
- **PCL-10137-3** DB37 Cable, 3 m
- **ADAM-3937** DB37 DIN-rail Wiring Board