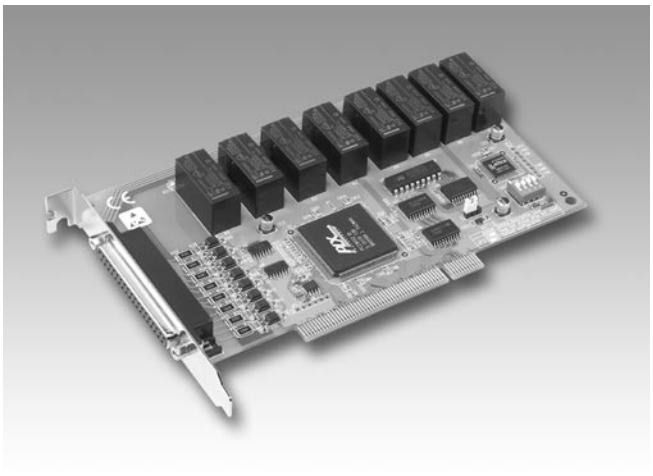
PCI-1761

8-ch Relay Actuator and 8-ch Isolated Digital Input Card



Features

- 8 relay output channels and 8 isolated digital input channels
- LED indicators to show activated relays
- 4 Form C and 4 Form A type relay output channels
- Output status read-back
- Retained relay output values when hot system reset
- High-voltage isolation on input channels (3,750 V_{DC})
- High ESD protection (2,000 V_{DC})
- High over-voltage protection (70 V_{DC})
- Wide input range (10 ~ 50 V_{DC})
- Interrupt handling capability
- BoardID™ switch

CE

Introduction

The PCI-1761 relay actuator and isolated D/I card is an add-on card for the PCI bus. It provides 8 optically-isolated digital inputs with isolation protection of 3,750 V_{DC} for collecting digital inputs in noisy environments and 8 relay actuators for serving as on/off control devices or small power switches. For easy monitoring, each relay is equipped with one red LED to show its on/off status. The PCI-1761's eight optically-isolated digital input channels are ideal for digital input in noisy environments or with floating potentials.

Rugged Protection

The PCI-1761 digital input channels feature a rugged isolation protection for industrial, lab and machinery automation applications. It durably withstands voltage up to 3,750 V_{DC}, protecting your host system from any incidental harms. If connected to an external input source with surge-protection, the PCI-1761 can offer up to a maximum of 2,000 V_{DC} ESD (Electrostatic Discharge) protection. Even with an input voltage rising up to 70 V_{DC}, the PCI-1761 can still manage to work properly, albeit for only a short period of time.

Reset Protection Fulfills Requirement for Industrial Applications

When the system has undergone a hot reset (i.e. without turning off the system power), the PCI-1761 can either retain output values of each channel, or return to its default configuration as open status, depending on its onboard jumper setting. This function protects the system from unwanted operations during unexpected system resets.

Specifications

Isolated Digital Input

- **Channels** 8
- **Optical Isolation** 3,750 V_{DC}
- **Opto-isolator Response Time** 25 µs
- **Over-Voltage Protection** 70 V_{DC}
- **Input Voltage** 10 ~ 50 V_{DC}
- **Input Current** 1.6 mA @ 10 V_{DC}
8.9 mA @ 50 V_{DC}

Relay Output

- **Channels** 8
- **Relay Type** SPDT (4 Form C and 4 Form A)
- **Rating (resistive)** 3 A @ 250 V_{AC} or 3 A @ 24 V_{DC}
- **Max. Switching Power** 750 AV, 72 W
- **Max. Switching Load** 10 mA @ 5 V_{DC}
- **Insulation Resistance** 1,000 MΩ min. (at 500 V_{DC})
- **Operate Time** 15 ms max.
- **Release Time** 5 ms max.

General

- **Connector** One 37-pin D-type connector
- **Dimensions (L x H)** 175 x 100 mm (6.9" x 3.9")
- **Power Consumption** +5 V @ 220 mA (typical)
+5 V @ 750 mA (max.)
- **Operating Temperature** 0 ~ 60° C (32 ~ 140° F) (refer to IEC 68-2-1, 2)
- **Storage Temperature** -20 ~ 70° C (-4 ~ 158° F)
- **Operating Humidity** 5 ~ 95 % RH non-condensing (refer to IEC 68-2-3)

Ordering Information

- **PCI-1761** 8-ch Relay Actuator and 8-ch Isolated D/I Card
- **PCL-10137-1** DB37 cable assembly, 1m
- **PCL-10137-2** DB37 cable assembly, 2m
- **PCL-10137-3** DB37 cable assembly, 3m
- **ADAM-3937** DB37 Wiring Terminal for Din-rail Mounting
- **PCLD-880** Universal screw terminal board