



Features

- Compatible with all PC-LabCards with D/I channels on either 20-pin flat cable or 50-pin Opto-22 compatible connectors
- 16 or 24 optically-isolated digital input channels
- Built-in screw terminals for easy input wiring
- LEDs indicate input logic status
- Inputs buffered with voltage comparators

Introduction

The PCLD-782 and PCLD-782B digital input daughterboards feature high-voltage ($> 1500 \text{ V}_{dc}$) optical isolation on all inputs. The PCLD-782 provides 16 input channels accessible through one 20-pin flat cable connector, standard on most PC-LabCards. The new PCLD-782B provides either 16 or 24 channels, depending on the connector you use. The PCLD-782B's 20-pin connector lets you access 16 channels, similar to the PCLD-782. The PCLD-782B also provides a 50-pin Opto-22 connector with access to 24 channels.

Both cards have on-board screw terminals for easy input wiring. Optically-isolated signal conditioning provides isolation between separate channels, as well as between each input channel and the PC. This isolation prevents floating potential and ground loop problems while protecting the input lines from potentially damaging fault conditions.

A red LED on each input channel indicates its status. If the input signal is high, the LED is on. You can configure each channel to work in either isolated or non-isolated mode. A variable resistor adjusts the threshold level for all 24 isolated input channels simultaneously.

Applications

- Digital signal sensing
- Switch status monitoring
- Limit switch monitoring

Specifications

- **Input channels:** 24 (PCLD-782B), 16 (PCLD-782)
- **Input range:** 0 ~ 24 V_{dc}
- **Input resistance:** 560 Ω
- **Isolation voltages:** 1500 V_{dc} min.
- **Threshold voltage:** 1.5 V_{dc} (VR adjustable)

- **Screw terminals:** Screw-clamp terminal blocks, accept #22 to #12 AWG wires
- **Connectors for digital bus**
 - PCLD-782: one 20-pin flat cable connector
 - PCLD-782B: one 20-pin flat cable connector and one 50-pin Opto-22 connector
- **Dimensions**
 - PCLD-782:** 3U– 205 mm x 114 mm (8.1" x 4.5")
 - PCLD-782B:** 4U– 220 mm x 132 mm (8.7" x 5.2")

Ordering Information

- **PCLD-782B**
16/24-channel Opto-isolated D/I Board, user's manual, one 1 meter 20-pin flat cable assembly (P/N PCL-10120-1) and one 1.2 meter 50-pin flat cable (P/N PCL-10150-1.2)
- **PCLD-782**
16-channel Opto-isolated D/I Board, user's manual and one 1 meter 20-pin flat cable assembly (P/N PCL-10120-1)
- **PCL-10120-1**
20-pin flat cable assembly, 1 m
- **PCL-10120-2**
20-pin flat cable assembly, 2 m
- **PCL-10150-1.2**
50-pin flat cable, 1.2 m (for connecting the PCL-722 or 724 to the PCLD-885, 782B or 785B)