Signal Conditioning Modules and Terminal Boards ADAM-3000

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<td>20-pin Flat Cable Wiring Terminal for DIN-rail Mounting</td>
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<td>ADAM-3925</td>
<td>DB25 Wiring Terminal for DIN-rail Mounting</td>
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<td>ADAM-3937</td>
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<td>ADAM-3944 (new)</td>
<td>44-pin Wiring Terminal for DIN-rail Mounting</td>
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<td>50-pin Flat Cable Wiring Terminal for DIN-rail Mounting</td>
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<td>ADAM-3950D</td>
<td>Dual 50-pin SCSI-II Wiring Terminal for DIN-rail Mounting</td>
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<td>68-pin SCSI-II Wiring Terminal for DIN-rail Mounting</td>
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<td>ADAM-3978</td>
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Courtesy of Steven Engineering, Inc. ● 230 Ryan Way, South San Francisco, CA 94080-6370 ● General Inquiries: (800) 670-4183 ● www.stevenengineering.com
## Terminal Boards Selection Guide

### Recommended cables, I/O wiring terminal boards and isolated DI/O terminals for connecting PCI-bus with CompactPCI DA&C cards

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<tr>
<th>DA&amp;C Card</th>
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<th>I/O Wiring Terminal Board</th>
<th>Cable</th>
<th>Isolated DI/O Terminal</th>
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<tr>
<td>PCI-1710/1710L/1710HSL/1710HSL/1711/1711L/1716L/1741/1742</td>
<td>PCL-10168</td>
<td>PCLD-8710</td>
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<td>PCLD-782</td>
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<td>PCI-1712/1712L</td>
<td>PCL-10168</td>
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</tr>
<tr>
<td>PCI-1721/1723/1780 MIC-3716/3780</td>
<td>PCL-10168</td>
<td>ADAM-3968</td>
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<tr>
<td>PCI-1751</td>
<td>PCL-10168</td>
<td>ADAM-3968</td>
<td>ADAM-3968/50</td>
<td>ADAM-3968/20</td>
</tr>
<tr>
<td>PCI-1713</td>
<td>PCL-10137</td>
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<td>PCLD-881B</td>
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<tr>
<td>PCI-1720/1750/1760/1761 MIC-3761</td>
<td>PCL-10137</td>
<td>ADAM-3937</td>
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<td>PCI-1784</td>
<td>PCL-10137H</td>
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*Courtesy of Steven Engineering, Inc. ● 230 Ryan Way, South San Francisco, CA 94080-6370 ● General Inquiries: (800) 670-4183 ● www.stevenengineering.com*
### Recommended cables, I/O wiring terminal boards and isolated DI/O terminals for connecting ISA-buses with DA&C cards

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<tr>
<th>ISA-bus DA&amp;C Card</th>
<th>Cable</th>
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**Introduction**

The ADAM-3000 Series consist of the most cost-efficient, field configurable, isolation-based, signal conditioners on the market today. The modules are easily installed to protect your instruments and process signals from the harmful effects of ground loops, motor noise, and other electrical interferences.

**Affordable Signal Isolation Solution**

Featuring optical isolation technology, the ADAM-3000 modules provide three-way (input/output/power) 1,000 V<sub>DC</sub> isolation. Optical isolation provides pin-point accuracy and stability over a wide range of operations at minimal power consumption.

**Flexible Analog Data Conversion**

The input/output range for the ADAM-3000 modules can be configured through switches located inside the module. The modules accept voltage, current, thermocouple or RTD as input, and pass voltage or current as output. Thermocouple input is handled by the built-in input thermocouple linearization circuitry and a cold junction compensation function. These ensure accurate temperature measurement and accurate conversion of this information to the voltage or current output.

**Configuration**

The ADAM-3000 modules use +24 V<sub>DC</sub> power. This electrical power wiring can be aquired from adjacent modules, which greatly simplifies wiring and maintenance. The I/O configuration switches are located inside the modules. To reach the switches, simply remove the modules from the DIN-rail bracket by sliding the modules downward.

**Modular Industrial Design**

The ADAM-3000 modules can be easily mounted on a DIN-rail, and signal wires can be connected through screw terminals. The screw terminals and input/output configuration switches are built inside the industrial grade plastic casing. With simple two-wire input/output cables, wiring is easy and reliable in harsh industrial environments.

**Applications**

- Signal isolation
- Signal transmitters
- Thermocouple/RTD/strain gauge measurements
- Signal amplifiers
- Noise filter

**Common Specifications**

- **Isolation**: 1,000 V<sub>DC</sub>
- **Indicators**: Power LED indicator
- **Power Requirement**: +24 V<sub>DC</sub> ± 10%
- **Case**: ABS
- **Screw Terminal**: Accepts 0.5 mm² – 2.5 mm² 1- #12 or 2- #14 – #22 AWG
- **Operating Temperature**: 0 – 70° C (32 – 158° F) (except ADAM-3011)
- **Storage Temperature**: -25 – 85° C (-13 – 185° F)

**Features**

- 1,000 V<sub>DC</sub> three-way isolation
- Easy input/output range configuration
- Flexible DIN-rail mounting
- Linearized thermocouple/RTD measurement
- Low power consumption
- Wide input bandwidth
### Isolated Signal Conditioning Modules

#### Block Diagram

- **3-Way Signal Isolation**
  - 3-way (input/output/power) 1,000 V isolation.

- **Field Configurable I/O Range**
  - The I/O range can be configured on site with switches inside the module.

- **Easy Daisy Chain Power Wiring**
  - Power can be connected conveniently from adjacent modules.

- **Interfacing to DA&C Card**
  - A wiring adapter can connect modules to a data acquisition card.

#### Dimensions

- **The ADAM-3000 Series Modules**
  - Unit: mm

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**Block Diagram of ADAM-3014**

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**Specifications**

**Thermocouple Input**
- **Common Mode Rejection**: 115 dB min
- **Input Type**
  - J: -40° ~ 760° C (±2° C)
  - K: 0° ~ 1000° C (±2° C)
  - T: -100° ~ 400° C (±2° C)
  - E: 0° ~ 1000° C (±2° C)
  - S: 500° ~ 1750° C (±4° C)
  - R: 500° ~ 1750° C (±4° C)
  - B: 500° ~ 1800° C (±4° C)
- **Isolation (three way)**: 1,000 V DC
- **Output Impedance**: 0.5 Ω
- **Stability (temperature drift)**: ±2° C
- **Voltage Output**: 0 – 10 V

**General**
- **Certifications**: CE, FM
- **Connectors**: Screw terminal
- **Enclosure**: ABS
- **Indicators**: Power LED indicator
- **Isolation**: 1,000 V DC
- **Power Consumption**: 1.4 W
- **Power Input**: +24 V DC ± 10%

**Environment**
- **Operating Temperature**: 0 – 50° C (32 – 122° F)
- **Storing Temperature**: -25 – 85° C (-13 – 185° F)

**Ordering Information**
- ADAM-3011 Isolated Thermocouple Input Module

**Specifications**

**RTD Input**
- **Accuracy**
  - Voltage: +/- 0.1% of full range (voltage) or +/- 0.15° C (voltage)
  - Current: +/- 0.2% of full range (current)
- **Bandwidth**: 4 Hz
- **Input CMR at DC**: 92 dB minimum
- **Input Connections**: 2, 3 or 4 wires
- **Input Type**: Pt or Ni RTD
- **RTD Types and Temperature Ranges**
  - Pt: -100° ~ 100° C
  - Pt: 0° ~ 200° C
  - Pt: 0° ~ 600° C
  - Pt: -100° ~ 0° C
  - Pt: -100° ~ 200° C
  - Pt: -50° ~ 50° C
  - Pt: -50° ~ 150° C
  - Pt: -100° ~ 100° C
  - Pt: 0° ~ 100° C
  - Pt: 0° ~ 200° C
  - Pt: 0° ~ 600° C
  - Ni: 0° ~ 100° C
  - Ni: -80° ~ 100° C
- **Output Range**: 0 ~ 5 V, 0 ~ 10 V, 0 ~ 20 mA
- **Output Resistance**: < 5 Ω
- **Temperature Drift**: +/- 30 ppm of full range

**General**
- **Certifications**: CE, FM
- **Connectors**: Screw terminal
- **Enclosure**: ABS
- **Indicators**: Power LED indicator
- **Isolation**: 1,000 V DC
- **Power Consumption**: < 0.95 W
- **Power Input**: 24 V DC ± 10%

**Environment**
- **Operating Temperature**: 0 – 70° C (32 – 158° F)
- **Storing Temperature**: -25 – 85° C (-13 – 185° F)

**Ordering Information**
- ADAM-3013 Isolated RTD Input Module
### ADAM-3014
#### Specifications

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<th>I/O</th>
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<td><strong>Accuracy</strong></td>
<td>±0.1% of full range (typical)</td>
</tr>
<tr>
<td><strong>Common Mode Rejection</strong></td>
<td>&gt; 100 dB @ 50 Hz/60 Hz</td>
</tr>
<tr>
<td><strong>Current Input</strong></td>
<td>Bipolar: ±20 mA  Unipolar: 0 – 20 mA  Input impedance: 250 Ω</td>
</tr>
<tr>
<td><strong>Current Output</strong></td>
<td>0 – 20 mA</td>
</tr>
<tr>
<td><strong>Stability (temperature drift)</strong></td>
<td>150 ppm (typical)</td>
</tr>
<tr>
<td><strong>Voltage Input</strong></td>
<td>Bipolar input: ±10 mV, ±50 mV, ±100 mV, ±0.5 V, ±1.0 V, ±5 V, ±10 V  Unipolar input: 0 – 10 mV, 0 – 50 mV, 0 – 100 mV, 0 – 0.5 V, 0 – 1 V, 0 – 5 V, 0 – 10 V  Input impedance: 2 MΩ  Input bandwidth: 2.4 kHz (typical)</td>
</tr>
<tr>
<td><strong>Voltage Output</strong></td>
<td>Bipolar: ±5 V, ±10 V  Unipolar: 0 – 10 V  Impedance: &lt; 50 Ω  Drive: 10 mA max.</td>
</tr>
</tbody>
</table>

#### General

- **Certifications**: CE, FM
- **Connectors**: Screw terminal
- **Enclosure**: ABS
- **Indicators**: Power LED indicator
- **Isolation (three way)**: 1,000 V<sub>DC</sub>
- **Power Consumption**:
  - Voltage output: 0.85 W
  - Current output: 1.2 W (typical)
- **Power Input**: 24 V<sub>DC</sub> ±10%

#### Environment

- **Operating Temperature**: 0 – 70° C (32 – 158° F)
- **Storing Temperature**: -25 – 85° C (-13 – 185° F)

### Ordering Information

- **ADAM-3014**: Isolated DC Input/Output Module

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### ADAM-3016
#### Specifications

<table>
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<tr>
<th>I/O</th>
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<tr>
<td><strong>Accuracy</strong></td>
<td>±0.1% of full range</td>
</tr>
<tr>
<td><strong>Bandwidth</strong></td>
<td>2.4 kHz (typical)</td>
</tr>
<tr>
<td><strong>Isolation Mode Rejection</strong></td>
<td>&gt;100 dB @ 50 Hz/60 Hz</td>
</tr>
<tr>
<td><strong>Current Output</strong></td>
<td>Current: 0 – 20 mA  Current load resistor: 0 – 500 Ω (Source)  Impedance: &lt; 50 Ω</td>
</tr>
<tr>
<td><strong>Stability (temperature drift)</strong></td>
<td>150 ppm (typical)</td>
</tr>
<tr>
<td><strong>Voltage Specifications</strong></td>
<td>Electrical input: ±10 mV, ±20 mV, ±30 mV, ±100 mV  Excitation voltage: 1 – 10 V&lt;sub&gt;DC&lt;/sub&gt; (60 mA max)</td>
</tr>
<tr>
<td><strong>Voltage Output</strong></td>
<td>Bipolar: ±5 V, ±10 V  Unipolar: 0 – 10 V  Impedance: &lt; 50 Ω</td>
</tr>
</tbody>
</table>

#### General

- **Certifications**: CE
- **Connectors**: Screw terminal
- **Enclosure**: ABS
- **Indicators**: Power LED indicator
- **Isolation (three way)**: 1,000 V<sub>DC</sub>
- **Power Consumption**:
  - Voltage output: ≤ 1.85 W
  - Current output: ≤ 2.15 W (typical)
- **Power Input**: 24 V<sub>DC</sub> ±10%

#### Environment

- **Operating Temperature**: -10– 70° C (14–158° F)
- **Storing Temperature**: -25– 85° C (-13–185° F)

### Ordering Information

- **ADAM-3016**: Isolated Strain Gauge Input Module
ADAM-3854  
ADAM-3864

**Features**
- High power relays can handle up to 5 A @ 300 VRC and 5 A @ 30 VRC
- 4 single-pole double-throw (SPDT) relays
- Industrial screw terminals for easy output wiring
- LED status indicators
- On-board varistor protects relay contact points
- DIN-rail mounting
- All the relay outputs and relay controls are accessible through wiring terminals, allowing the ADAM-3854 to be easily connected to any item of equipment or device such as programmable logic controllers (PLCs).

**Specifications**

**I/O**
- **Channels**: 4
- **Contact Rating**
  - AC: 250 V @ 5 A
  - DC: 30 V @ 5 A
- **Contact Resistance**: 100 mA
- **Operation Time**: 15 ms max.
- **Relay Type**: SPDT (Form C)
- **Release Time**: 5 ms max.
- **Life Expectancy**: 1.7 x 10^5 at rated load

**Varistor**
- **Clamping Voltage**: 760 V (10 A)
- **Maximum Applied Voltage**: 300 Vmax
- **Max. Peak Current**: 1,200 A for 8 ms
- **Varistor Voltage**: 470 V (current = 1 mA)

**General**
- **Connectors**: Screw terminals
- **Dimensions (LxWxH)**: 112.5 x 118.4 x 46 mm (4.43” x 4.66” x 1.81”)
- **LED Indicators**: Status displayed for each relay
- **Mounting**: DIN 35 rail
- **Power Consumption**: 2.2 W
- **Power Input**: +24 VRC

**Ordering Information**
- ADAM-3854  
  4-channel DIN-rail Mounting Power Relay Module

**Applications**
- Signal switching
- On/off control
- Valve/solenoid control
- Annunciator control
- Alarm activation

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**Features**
- 4-channel carrier backplane for any combination of AC or DC I/O modules
- 2,500 Vrms optical isolation
- LED channel status indicator for easy monitoring
- On-board fuse protection
- DIN-rail mounting

**Specifications**

**Input Modules**
- **Field Side**
  - **Turn on/off Time**: IAC24 series: 20 msec. max.
  - **Input on/off Voltage Range**: IAC24 series: 90 ~ 140 V/45 V RMS
  - **IDC24B series**: 100 msec. max.
  - **Input Voltage**: IDC24B series: 180 ~ 280 V/80 V RMS
  - **IDC24B series**: 100 ~ 140 V/45 V RMS
- **Logic Side**
  - **Breakdown Voltage**: 30 VDC
  - **Input Resistance**: IAC24 series: 14 kΩ
  - **IDC24B series**: 1.5 kΩ

**Output Modules**
- **Field Side**
  - **Contact Voltage Drop**: 1.6 V max.
  - **Current Rating**: 3 A max. (@ 25°C)
  - **Turn on/Off Time**: OAC series: ½ AC cycle max.
  - **ODC series**: 100 µsec./75 µsec. max.
- **Logic Side**
  - **Input Resistance**: 220 Ω
  - **Supply Current**: 12 mA max.
  - **Supply Voltage**: 24 VDC

**Ordering Information**
- ADAM-3854  
  4-channel DIN-rail Mounting Power Relay Module

**Applications**
- Signal switching
- On/off control
- Valve/solenoid control
- Annunciator control
- Alarm activation

---

**Features**
- 4-channel carrier backplane for any combination of AC or DC I/O modules
- 2,500 Vrms optical isolation
- LED channel status indicator for easy monitoring
- On-board fuse protection
- DIN-rail mounting

**Specifications**

**Input Modules**
- **Field Side**
  - **Turn on/off Time**: IAC24 series: 20 msec. max.
  - **Input on/off Voltage Range**: IAC24A series: 200 VAC max.
  - **IDC24B series**: 100 msec. max.
  - **Input Voltage**: IDC24B series: 180 ~ 280 Vacco 80 Vaco
  - **IDC24B series**: 100 ~ 140 V/45 V RMS
- **Logic Side**
  - **Breakdown Voltage**: 30 VDC
  - **Input Resistance**: IAC24 series: 14 kΩ
  - **IDC24B series**: 1.5 kΩ

**Output Modules**
- **Field Side**
  - **Contact Voltage Drop**: 1.6 V max.
  - **Current Rating**: 3 A max. (@ 25°C)
  - **Turn on/Off Time**: OAC series: ½ AC cycle max.
  - **ODC series**: 100 µsec./75 µsec. max.

**Ordering Information**
- ADAM-3854  
  4-channel DIN-rail Mounting Power Relay Module

**Applications**
- Signal switching
- On/off control
- Valve/solenoid control
- Annunciator control
- Alarm activation
Introduction

PCLD-788 multiplexes 16 channels into a single I/O channel of an A/D converter, voltmeter or IEEE-488-based instrument. Up to 16 PCLD-788s can be cascaded for a total of 256 fully-isolated differential channels. The PCLD-788 can be controlled by any PC-LabCard™ product via a 16-bit 20-pin digital output port, found on cards such as the PCL-711B, PCL-812PG or the PCL-818 series.

Channel selection (0-15) and board selection (0-15) are done by programming the high-order four bits and low order four bits of a digital output byte from the main I/O card in use.

Specifications

I/O
- Channel Closed Signal: TTL-level pulse
- Cold-junction Sensor: +24.4 mV/°C, 0 V at 0°C
- Output Contact Rating: Break-before-make with 3 msec. minimum break time
- Contact Resistance: 200 Ω max.
- Input Channels: 16 isolated differential inputs
- Programming
  - Max. Input Voltage: 100 VDC or 100 V peak AC
  - Max. Switching Current: 0.5 A
  - Max. Switching Power: 10 Ω
  - Operating Time: 1 msec. max.
  - Relay Life Expectancy: 100 million cycles min. at 10 VDC and 1 mA
  - Release Time: 1 msec. max.

General
- Certifications: CE
- Connectors
  - Controller: 2 x 20-pin flat-cable connectors, second connector in parallel for daisy chaining
  - I/O: Screw terminals
- Dimensions (L x W): 205 x 114 mm (8" x 4.5")
- Mounting: 4 x screw holes for flat surface mounting
- Power Consumption: +5 V @ 380 mA max.

Ordering Information

- PCLD-788
- 16-channel Relay Multiplexer Board, user's manual and two 1 meter 20-pin flat cables (P/N: PCL-10120-1)

Features

- 16 to 1 channel expansion
- Differential and fully isolated multiplexing
- Break-before-make relay control
- "Channel closed" signal for precise A/D triggering
- Up to 16 PCLD-788s can be cascaded for 256 channels
- Easy wiring for large channel count configuration
- On-board cold-junction circuitry for thermocouple measurement

Applications

- Channel multiplexing for analog input channels of PCL-711B, PCL-812PG or PCL-818 series cards

Pin Assignments

<table>
<thead>
<tr>
<th>CN2 &amp; CN3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 C1</td>
</tr>
<tr>
<td>3 4 C3</td>
</tr>
<tr>
<td>5 6 C5</td>
</tr>
<tr>
<td>7 8 C7</td>
</tr>
<tr>
<td>9 10</td>
</tr>
<tr>
<td>11 12</td>
</tr>
<tr>
<td>13 14</td>
</tr>
<tr>
<td>15 16</td>
</tr>
<tr>
<td>GND 17 18</td>
</tr>
<tr>
<td>+5V 19 20</td>
</tr>
<tr>
<td>+12V</td>
</tr>
</tbody>
</table>

PCLD-788 Block Diagram

Courtesy of Steven Engineering, Inc. ● 230 Ryan Way, South San Francisco, CA 94080-6370 ● General Inquiries: (800) 670-4183 ● www.stevenengineering.com
**PCLD-789D**

**Amplifier and Multiplexer Board**

**Features**
- Multiplexes 16 differential inputs to one A/D input
- Expands a PC-LabCard™ product's analog inputs to 128 channels
- High-grade instrumentation amplifier provides switch selectable gains of 1, 2, 10, 50, 100, 200, 1,000
- On-board cold-junction compensation circuits for direct thermocouple measurement
- Built-in signal conditioning functions include filter, attenuator and current shunt
- Second connectors on-board allow daisy chaining
- Screw-clamp terminal blocks permit easy and reliable connections

**Introduction**
PCLD-789D is a front-end signal conditioning and channel multiplexing daughterboard for use with PC-LabCard™ product’s analog input ports. It multiplexes 16 differential input channels into a single A/D converter input channel. You can cascade up to ten PCLD-789Ds, allowing a single data acquisition card to access 160 analog input channels. PCLD-789D has DB37 and 20-pin flat cable connectors.

The PCLD-789D uses a high-grade instrumentation amplifier that provides switch-selectable gains of 1, 2, 10, 50, 100, 200 and 1,000. This amplifier lets you accurately measure low-level signals with your PC-LabCard transducers. A wide variety of thermocouples are supported with software compensation and linearization.

**Specifications**

**I/O**
- **Cold-Junction Compensation** +24.4 mV/°C, 0 V at 0°C
- **Input Channels** 16 differential
- **Input Conditions**

<table>
<thead>
<tr>
<th>Gains</th>
<th>CMRR</th>
<th>Nonlinearity</th>
<th>Setting Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000</td>
<td>125 dB</td>
<td>0.005% FSR</td>
<td>75 µsec.</td>
</tr>
<tr>
<td>100</td>
<td>115 dB</td>
<td>0.005% FSR</td>
<td>15 µsec.</td>
</tr>
<tr>
<td>10</td>
<td>105 dB</td>
<td>0.007% FSR</td>
<td>15 µsec.</td>
</tr>
<tr>
<td>1</td>
<td>85 dB</td>
<td>0.015% FSR</td>
<td>15 µsec.</td>
</tr>
</tbody>
</table>

- **Input Range**  ±10 V maximum, depending on the selected gain
- **Output Range** ±10 V maximum
- **Overvoltage Protection** ±30 V continuous

**General**
- **Certifications** CE
- **Connectors**
  - Controller: 1 x DB37 (male) connector
  - 2 x 20-pin flat cable connectors for daisy chaining
- **I/O**
  - Screw terminals
- **Dimensions (L x W)** 205 x 114 mm (8.1" x 4.5")
- **Mounting** 4 x screw holes for flat surface mounting
- **Power Consumption** +5 V @ 30 mA max, +12 V @ 80 mA max

**Applications**
- Channel expansion
- Low level signal measurement
- Thermocouple measurement
- Signal amplification and conditioning

**Ordering Information**
- **PCLD-789D** Amplifier and Multiplexer Board with DB37 connector and 20-pin flat-cable connectors. (Includes DB37 and 20-pin flat cable assemblies)

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**Courtesy of Steven Engineering, Inc. ● 230 Ryan Way, South San Francisco, CA 94080-6370 ● General Inquiries: (800) 670-4183 ● www.stevenengineering.com**
PCLD-782
PCLD-782B

16-channel Opto-Isolated D/I Board
16/24-channel Opto-Isolated D/I Board

Features
- Compatible with all PC-LabCard™ products 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
PCLD-782 and PCLD-782B digital input daughterboards feature high-voltage (> 1,500 V_{DC}) optical isolation on all inputs. PCLD-782 provides 16 input channels accessible through one 20-pin flat cable connector, which is standard on most PC-LabCard™ products. The PCLD-782B provides either 16 or 24 channels, depending on what connector you use. The PCLD-782B's 20-pin connector both cards have onboard 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 lit. 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.

Specifications

Digital Input
- Input Channels: 24 (PCLD-782B), 16 (PCLD-782)
- Input Range: 0 – 24 V_{DC}
- Input Resistance: 560 Ω
- Isolation Voltages: 1,500 V_{DC} min.
- Threshold Voltage: 1.5 V_{DC} (VR adjustable)

General
- Certifications: CE
- Connectors:
  - Digital Input: Screw terminals (#12 – 22 AWG)
  - Controller: PCLD-782: 1 x 20-pin flat cable connector (CN1)
  - and 1 x 50-pin Opto-22 connector (CN2)
  - PCLD-782B: 3U – 205 x 114 mm (8.1" x 4.5")
  - Dimensions (L x W)
  - PCLD-782B: 4U – 220 x 132 mm (8.7" x 5.2")
  - LED Indicators: Indicates input logic status
  - Mounting: 4 x screw holes for flat surface mounting

Ordering Information

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

Pin Assignments

<table>
<thead>
<tr>
<th>CN1</th>
<th>CN2</th>
</tr>
</thead>
<tbody>
<tr>
<td>D10</td>
<td>1</td>
</tr>
<tr>
<td>D2</td>
<td>2</td>
</tr>
<tr>
<td>D4</td>
<td>3</td>
</tr>
<tr>
<td>D5</td>
<td>4</td>
</tr>
<tr>
<td>D12</td>
<td>5</td>
</tr>
<tr>
<td>D6</td>
<td>6</td>
</tr>
<tr>
<td>D16</td>
<td>7</td>
</tr>
<tr>
<td>D10</td>
<td>8</td>
</tr>
<tr>
<td>D8</td>
<td>9</td>
</tr>
<tr>
<td>D11</td>
<td>10</td>
</tr>
<tr>
<td>D13</td>
<td>11</td>
</tr>
<tr>
<td>D15</td>
<td>12</td>
</tr>
<tr>
<td>D14</td>
<td>13</td>
</tr>
<tr>
<td>D16</td>
<td>14</td>
</tr>
<tr>
<td>D17</td>
<td>15</td>
</tr>
<tr>
<td>D18</td>
<td>16</td>
</tr>
<tr>
<td>GND</td>
<td>17</td>
</tr>
<tr>
<td>+5 V</td>
<td>18</td>
</tr>
</tbody>
</table>

Ordering Information
- PCLD-782B: 16/24-channel Opto-isolated D/I Board, user's manual, one 1m 20-pin flat cable assembly (P/N: PCL-10120-1) and one 1.2m 50-pin flat cable (P/N: PCL-10150-1.2)
- PCLD-782: 16-channel Opto-isolated D/I Board, user's manual and 1 x 1 m 20-pin flat cable assembly (P/N: PCL-10120-1)
- PCL-10120-1: 20-pin flat cable assembly, 1m
- PCL-10120-2: 20-pin flat cable assembly, 2m
- PCL-10150-1.2: 50-pin flat cable. 1.2m (for connecting the PCL-722 or 724 to the PCLD-885, 782B or 785B)
PCLD-8751
PCLD-8761

48-channel Opto-Isolated Digital Input Boards
24-channel Opto-Isolated D/I and 24-Channel Relay Output Board

Features
- 48 optically-isolated digital input channels
- Built-in plug-in screw terminals for easier wiring
- LEDs indicate input logic status
- Input buffered with voltage comparators
- Wet/Dry contact set by DIP switches
- Wide input range from 5 to 30 V

Specifications
Digital Input
- Channels: 48 isolated digital inputs
- Contact Mode: Wet contact
- Isolation Voltage: 3,500 V
- Logic Modes: Positive Logic, Negative Logic (set by jumper)
- Signal Voltage: 0 – 30 V, VIH (MIN): 4 V, VIL (MAX): 1 V

General
- Certifications: CE
- Connectors: Controller: SCSI-68 male
- Dimensions: 255 x 121 mm
- LED Indicators: One for each channel to indicate logic status
- Mounting: DIN 35 rail

Ordering Information
- PCLD-8751: 48-Channel Opto-isolated Digital Input Board

Features
- Built-in plug-in screw terminals for easier wiring
- LED status indicators for D/I and relay output
- Digital inputs buffered with voltage comparators
- Wet/Dry contact set by DIP switches for D/I
- Wide input range from 5 to 30 V
- INT/EXT Power selection by jumper

Specifications
Digital Input
- Channels: 24 IDI with LED and 24 Relay (SPDT) Form C with LED
- Contact Mode: Wet contact and dry contact for each IDI (set by switch)
- Digital Input: 0–30 V VIH(MIN):4 V, VIL(MAX): 1V
- Isolation Voltage: 3,500 V (Isolated DI), 1,500V (Relay)
- Logic Mode: Positive Logic, Negative Logic (set by jumper) (IDI and Relay are independent)

Relay Output
- Contact Rating: 30 VDC @ 1 A, 120 VAC @ 0.5 A
- Contact Resistance: < 100 ohm
- Electrical Endurance: 5*107 times at 12 V/10 mA
- Mechanical Endurance: 108 times
- Operation Time: 5 ms Max
- Release Time: 6 ms Max

General
- Certifications: CE
- Connectors: Controller: SCSI-68 male
- Dimensions: 285 x 121 mm
- Mounting: DIN 35 rail
- Power Consumption: +5 V @ < 380 mA, +12 V @ < 240 mA +70*n (mA)
- (*n indicate the number of relays)

Power Selection: PCI Bus or External power(7–30 V) by jumper

Ordering Information
- PCLD-8761: 24-Channel Opto-isolated D/I and 24-Channel Relay (SPDT) output Board
PCLD-8762
48-channel Relay Output Board

Features
- Built-in plug-in screw terminals for easier wiring
- LED status indicators for Relay output
- DIN-rail mounting
- On-board relay driver circuits

Specifications
Relay Output
- Contact Rating: 30 Vdc @ 1 A, 120 Vdc @ 0.5 A
- Contact Resistance: < 100 ohm
- Electrical Endurance: 5 x 10^7 times at 12 V/10 mA
- Mechanical Endurance: 108 times
- Operation Time: 5 ms Max
- Release Time: 6 ms Max

General
- Certifications: CE
- Connectors: Controller: SCSI-68 (male)
- Digital Input: Plug-in screw terminals: (#14 ~ 24 AWG)
- Dimensions: 285 x 117 mm
- Mounting: DIN 35 rail
- Power Consumption: 7 V @ 1.8 A, 30 V @ 0.45 A

Ordering Information
- PCLD-8762 48-Channel I Relay (SPDT) output Board

Specifications
-Courtesy of Steven Engineering, Inc. ● 230 Ryan Way, South San Francisco, CA 94080-6370 ● General Inquiries: (800) 670-4183 ● www.stevenengineering.com
**Features**
- Compatible with PC-LabCard™ products with 20-pin digital output connector and 50-pin Opto-22 digital output connector (PCLD-785B only)
- Automatic selection of control logic (PCLD-785B only): Negative logic for the Opto-22 connector Positive logic for the 20-pin flat cable connector
- Relays: PCLD-785: 16 SPDT, PCLD-785B: 16 or 24 SPDT
- On-board relay driver circuits
- Screw terminals for easy output wiring
- LED status indicators

**Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>PCLD-785</th>
<th>PCLD-785B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Channels</td>
<td>16 (CN1, 20-pin conn.)</td>
<td>16 (CN1, 20-pin conn.)</td>
</tr>
<tr>
<td>Contact Ratings</td>
<td>120 V&lt;sub&gt;ac&lt;/sub&gt; @ 0.5 A, 30 V&lt;sub&gt;dc&lt;/sub&gt; @ 1 A</td>
<td>120 V&lt;sub&gt;ac&lt;/sub&gt; @ 0.5 A, 30 V&lt;sub&gt;dc&lt;/sub&gt; @ 1 A</td>
</tr>
<tr>
<td>Contact Resistance</td>
<td>&lt; 100 mΩ</td>
<td>&lt; 100 mΩ</td>
</tr>
<tr>
<td>Control Logic</td>
<td>20-pin flat cable conn.: Input TTL high (+5 V) = Relay on</td>
<td>50-pin Opto-22 conn.: Input TTL low (0 V) = Relay on</td>
</tr>
<tr>
<td>Operation Time</td>
<td>5 ms max.</td>
<td>5 ms max.</td>
</tr>
<tr>
<td>Insulation Resistance</td>
<td>100 MΩ</td>
<td>100 MΩ</td>
</tr>
<tr>
<td>Life Expectancy</td>
<td>AC: 5 x 10&lt;sup&gt;6&lt;/sup&gt; @ 110 V/0.3 A</td>
<td>DC: 5 x 10&lt;sup&gt;6&lt;/sup&gt; @ 24 V/1.25 A</td>
</tr>
<tr>
<td>Relay Type</td>
<td>SPDT (Single-Pole Double-Throw) Form C</td>
<td>SPDT (Single-Pole Double-Throw) Form C</td>
</tr>
<tr>
<td>Release Time</td>
<td>5 ms max.</td>
<td>5 ms max.</td>
</tr>
</tbody>
</table>

**General**
- Connectors
  - PCLD-785: Input: 20-pin flat cable
  - Output: Screw clamp terminal block (PCLD-785B)
- Dimensions (LxW): PCLD-785: 114 x 220 mm (4.5” x 8.7”)
  - PCLD-785B: 132 x 220 mm (5.2” x 8.7”)
- Power Consumption: +5 V @ < 100 mA; +12 V @ 33 mA for each relay
- Power Input: +5 V@, +12 V@: Jumper select either PC bus or external supply

**Ordering Information**
- PCLD-785
  - 16-channel Relay Output Board, user’s manual, 1m 20-pin flat cable assembly (P/N: PCL-10120-1) and 1.2m 50-pin flat cable assembly (P/N: PCL-10150-1-2)
- PCLD-785B
  - 24-channel Relay Output Board, user’s manual, 1m 20-pin flat cable assembly (P/N: PCL-10120-1) and 1.2m 50-pin flat cable assembly (P/N: PCL-10150-1-2)
- PCL-10120-1
  - 20-pin flat cable assembly, 1m
- PCL-10120-2
  - 20-pin flat cable assembly, 2m
- PCL-10150-1-2
  - 50-pin flat cable, 1.2m (connects the PCL-722 or 724 to the PCLD-885, 782B or 785B)
PCLD-786
PCLD-7216

8-channel SSR I/O Module Carrier Board
16-channel SSR I/O Module Carrier Board

Features
- Up to eight AC or DC solid state relay modules
- Photo-coupler isolated operation
- Eight external relay drivers
- LED status indicators

Specifications

AC Solid State Relays
- 1 Cycle Surge: 40 A
- Blocking Voltage: ±600 V min.
- OFF Leakage Current: 8 mA max.
- ON-state Voltage: 1.6 V max.
- Output Rating: 24 – 280 Vac @ 3.0 A
- Turn On: zero volts
- Turn On/Off Time: <½ cycle
- Type: PCLM-OAC5A

DC Solid State Relays
- 1 Second Surge: 5 A
- OFF Leakage Current: 1 mA max.
- ON-state Voltage: 1.4 V max.
- Output Rating: 5 – 60 Vdc @ 3.0 A
- Turn On/Off Time: 750 µs max.
- Type: PCLM-IDC5B

External Relay Drivers
- Channels: 8 channels
- Coil Driving Voltage: +5 V, +12 V from PC or external source
- Driver Type: ULN2003, open collector type
- Max. Driving Current: 125 mA each channel

General
- Dimensions (LxW): 205 x 114 mm (8.1" x 4.5")

Ordering Information
- PCLD-786: 8-channel SSR I/O Module Carrier Board, user’s manual and one 1m 20-pin flat cable assembly (P/N: PCL-10120-1)
- PCLM-OAC5A: Single piece AC SSR module (280 Vac, 3 A)
- PCLM-IDC5B: Single piece DC SSR module (60 Vdc, 3 A)

Note: PCLD-786 does not include SSRs. They must be ordered by selecting single piece SSR modules according to your requirements.

Features
- Channel status reflected by on-board LED for easy monitoring
- Optically isolated inputs and outputs between computer and field devices
- On-board fuse protection

Specifications

Input Modules
- Field Side
  - Input On/Off Voltage Range: IAC5 series: 90 – 140 V/45 Vmax
  - IAC5A series: 180 – 280 V/80 Vmax
  - IDC5B series: 3 – 32 V/1 V
  - IAC5 series: 14 kΩ, IAC5A series: 44 kΩ
  - Turn on/off Time: IAC5 series: 20 msec, IAC5A series: 20 msec max.
  - IDC5B series: 100 msec max.
- Logic Side
  - Breakdown Voltage: 30 Vdc
  - Output Current: 100 mA max.
  - Output Voltage Drop: 0.4 V max.
  - Supply Current: 12 mA max.
  - Supply Voltage: 4 – 6 V

Output Modules
- Field Side
  - Current Rating: 3 A max. (@ 25° C)
  - Contact Voltage Drop: 1.6 V max.
  - Turn on/off Time: OAC series: ½ AC cycle max.
  - ODC series: 100 µsec/750 µsec. max.
- Logic Side
  - Input Resistance: 220 Ω
  - Supply Voltage: 4 – 6 V
  - Supply Current: 12 mA max.

General
- Logic side connectors: 50-pin edge connector, Opto-22 compatible
- Dimensions (LxWxH): 367 x 111 x 56 mm (14.4" x 4.4" x 2.2")

Ordering Information
- PCLD-7216: 16-channel SSR I/O Module Carrier Board, one 1.2m, 50-pin flat cable (PCL-10151-1), one 1m 20-pin flat cable (PCL-10120-1) and user’s manual
**Introduction**

PCLD-780 and PCLD-880 universal screw-terminal boards provide convenient and reliable signal wiring for PC-LabCard™ products with 20-pin flat-cable connectors. PCLD-880 is also equipped with a DB37 connector to support PC-LabCard™ products with DB37 connectors.

PCLD-780

You can easily construct a low-pass filter, attenuator or current-to-voltage converter by adding resistors and capacitors onto the board’s circuit pads.

**Applications**

- Field wiring for analog and digital I/O channels of PC-LabCard™ products which employ the standard 20-pin flat cable connectors or DB37 connectors (only PCLD-880)
- Signal conditioning circuits can be implemented as illustrated in the following examples:
  
  a) Straight-through connection (factory setting)
  
  \[
  \begin{align*}
  &\text{RAn} = 0 \Omega \\
  &\text{RBn} = \text{none} \\
  &\text{Cn} = \text{none}
  \end{align*}
  \]

  d) 4 – 20 mA to 1 – 5 VDC signal converter:
  
  \[
  \begin{align*}
  &\text{RAn} = 0 \Omega \\
  &\text{RBn} = 250 \Omega \ (0.1\% \text{ precision resistor}) \\
  &\text{Cn} = \text{none}
  \end{align*}
  \]

  \[
  \begin{align*}
  &\text{Ordering Information} \\
  &\text{PCLD-780} \\
  &\text{PCLD-880} \\
  &\text{PCLD-880 only} \\
  &\text{PCLD-880 only}
  \end{align*}
  \]

  e) 1.6 kHz (3dB) low pass filter
  
  \[
  \begin{align*}
  &\text{RAn} = 10 \text{ k}\Omega \\
  &\text{RBn} = \text{none} \\
  &\text{Cn} = 0.01 \text{ F} \\
  &f_{\text{3dB}} = \frac{1}{2\pi RAnCn}
  \end{align*}
  \]

  f) 10 : 1 voltage attenuator:
  
  \[
  \begin{align*}
  &\text{RAn} = 9 \text{ k}\Omega \\
  &\text{RBn} = 1 \text{ k}\Omega \\
  &\text{Cn} = \text{none} \\
  &\text{Attenuation} = \frac{\text{RBn}}{\text{RAn} + \text{RBn}}
  \end{align*}
  \]

  (Assume source impedance << 10 k\Ω)

**Features**

- Pin to pin design
- Low-cost universal screw-terminal boards for industrial applications
- 40 terminal points for two 20-pin flat cable connector ports
- Reserved space for signal-conditioning circuits such as low-pass filter, voltage attenuator and current-to-voltage conversion
- Table-top mounting using nylon standoffs. Screws and washers provided for panel or wall mounting

**PCLD-780 only**

- Screw-clamp terminal-blocks allow easy and reliable connections
- Dimensions: 102 x 114 mm (4.0" x 4.5")

**PCLD-880 only**

- Supports PC-LabCard™ products with DB-37 connectors
- Industrial-grade terminal blocks (barrier-stripe) permit heavy-duty and reliable connections
- Dimensions: 221 x 115 mm (8.7" x 4.5")

**Pin Assignments**

- CN1
  
  \[
  \begin{align*}
  &\text{A1} \quad 1 \quad 2 \quad \text{A2} \\
  &\text{A3} \quad 3 \quad 4 \quad \text{A4} \\
  &\text{A5} \quad 5 \quad 6 \quad \text{A6} \\
  &\text{A7} \quad 7 \quad 8 \quad \text{A8} \\
  &\text{A9} \quad 9 \quad 10 \quad \text{A10} \\
  &\text{A11} \quad 11 \quad 12 \quad \text{A12} \\
  &\text{A13} \quad 13 \quad 14 \quad \text{A14} \\
  &\text{A15} \quad 15 \quad 16 \quad \text{A16} \\
  &\text{A17} \quad 17 \quad 18 \quad \text{A18} \\
  &\text{A19} \quad 19 \quad 20 \quad \text{A20}
  \end{align*}
  \]

- CN2
  
  \[
  \begin{align*}
  &\text{B1} \quad 1 \quad 2 \quad \text{B2} \\
  &\text{B3} \quad 3 \quad 4 \quad \text{B4} \\
  &\text{B5} \quad 5 \quad 6 \quad \text{B6} \\
  &\text{B7} \quad 7 \quad 8 \quad \text{B8} \\
  &\text{B9} \quad 9 \quad 10 \quad \text{B10} \\
  &\text{B11} \quad 11 \quad 12 \quad \text{B12} \\
  &\text{B13} \quad 13 \quad 14 \quad \text{B14} \\
  &\text{B15} \quad 15 \quad 16 \quad \text{B16} \\
  &\text{B17} \quad 17 \quad 18 \quad \text{B17} \\
  &\text{B19} \quad 19 \quad 20 \quad \text{B20}
  \end{align*}
  \]

- CN6 (PCLD-880 only)
  
  \[
  \begin{align*}
  &\text{A1} \quad 1 \quad 2 \quad \text{A2} \\
  &\text{A3} \quad 3 \quad 4 \quad \text{A4} \\
  &\text{A5} \quad 5 \quad 6 \quad \text{A6} \\
  &\text{A7} \quad 7 \quad 8 \quad \text{A8} \\
  &\text{A9} \quad 9 \quad 10 \quad \text{A10} \\
  &\text{A11} \quad 11 \quad 12 \quad \text{A12} \\
  &\text{A13} \quad 13 \quad 14 \quad \text{A14} \\
  &\text{A15} \quad 15 \quad 16 \quad \text{A16} \\
  &\text{A17} \quad 17 \quad 18 \quad \text{A18} \\
  &\text{A19} \quad 19 \quad 20 \quad \text{A20}
  \end{align*}
  \]

**Ordering Information**

- **PCLD-780**
  
  Screw terminal Board, two 1m 20-pin flat cables (PCL-10120-1)

- **PCLD-880**
  
  Industrial Wiring Terminal Board, two 1m 20-pin flat cables (PCL-10120-1), and one PCL-10501 adapter (20-pin analog flat connector to DB37 connector)

- **PCL-10137-1**
  
  DB37 cable assembly, 1m

- **PCL-10137-2**
  
  DB37 cable assembly, 2m

- **PCL-10137-3**
  
  DB37 cable assembly, 3m
Introduction

The PCLD-8115 screw-terminal board offers convenient and reliable signal wiring for multifunction cards with 20-pin flat cable connectors or DB37 connectors, such as the PCL-818 series cards. PCLD-8710 is designed to match multifunction cards with 68-pin SCSI-II connectors, such as the PCI-1710/1710L/1710HG/1710HGL/1711/1711L/1716/1716L cards.

This screw-terminal board also includes cold junction sensing circuitry that allows direct measurements from thermocouple transducers. Together with software compensation and linearization, every thermocouple type can be accommodated.

Due to its special PCB layout, you can install passive components to construct your own signal-conditioning circuits. So you can easily construct a low-pass filter, attenuator or current shunt converter by adding resistors and capacitors onto the board circuit pads.

Applications

- Field wiring for analog and digital I/O channels of PC-LabCard™ products.
- Signal conditioning circuits can be implemented as illustrated in the following examples:

  a) Straight-through connection (factory setting)
     \[ R_{An} = 0 \ \Omega \ \text{(short)} \]
     \[ R_{Bn} = \text{none} \]
     \[ C_{n} = \text{none} \]

     ![Diagram of straight-through connection]

  b) 1.6 kHz (3dB) low pass filter
     \[ R_{An} = 10 \ \Omega \]
     \[ R_{Bn} = \text{none} \]
     \[ C_{n} = 0.01 \ \mu F \]
     \[ f_{c} = \frac{R_{Bn}}{R_{An} + R_{Bn}} \]

  c) 10 : 1 voltage attenuator:
     \[ R_{An} = 9 \ \Omega \]
     \[ R_{Bn} = 1 \ \Omega \]
     \[ C_{n} = \text{none} \]
     \[ \text{Attenuation} = \frac{R_{Bn}}{R_{An} + R_{Bn}} \]
     (Assume source impedance << 10 \ \Omega)

  d) 4 ~ 20 mA to 1 ~ 5 \ \text{V} \_\text{DC} \ signal converter:
     \[ R_{An} = 0 \ \Omega \ \text{(short)} \]
     \[ R_{Bn} = 250 \ \Omega \ \text{(0.1\% precision resistor)} \]
     \[ C_{n} = \text{none} \]

Ordering Information

- PCLD-8115: Industrial Wiring Terminal Board with CJC circuit and DB37 cable assembly
- PCLD-8710: Industrial Wiring Terminal Board with CJC circuit for DIN-rail mounting (cable not included)
- PCL-10137-1: DB37 cable assembly, 1m
- PCL-10137-2: DB37 cable assembly, 2m
- PCL-10137-3: DB37 cable assembly, 3m
- PCL-10168-1: 68-pin SCSI-II cable with special shielding for noise reduction, 1m
- PCL-10168-2: 68-pin SCSI-II cable with special shielding for noise reduction, 2m
ADAM-3900 Series

ADAM-3909
DB9 Wiring Terminal for DIN-rail Mounting

Features
- Low cost universal DIN-rail mounting screw terminal module for PC-LabCard™ products with DB9 connector.
- Case dimensions (W x L x H): 77.5 x 45 x 51 mm (3.1" x 1.8" x 2.0")

To Be Used With
PCL-728, PCL-740, PCL-741, PCL-743B, PCL-745B, PCL-832

ADAM-3915
DB15 Wiring Terminal for DIN-rail Mounting

Features
- Low cost universal DIN-rail mounting screw terminal module for AMONet cards with DB15 female connector.
- Case dimensions (W x L x H): 77.5 x 68 x 51 mm (3.1" x 2.7" x 2.0")

To Be Used With
PCI-1202, ADAM-3240

ADAM-3920
20-pin Flat Cable Wiring Terminal for DIN-rail Mounting

Features
- Low cost universal DIN-rail mounting screw terminal module for PC-LabCard products with 20-pin connector.
- Case dimensions (W x L x H): 77.5 x 67.5 x 51 mm (3.1" x 2.7" x 2.0")

To Be Used With

ADAM-3937
DB37 Wiring Terminal for DIN-rail Mounting

Features
- Low cost universal DIN-rail mounting screw terminal module for DA&C cards with DB37 female connector.
- Case dimensions (W x L x H): 77.5 x 146.3 x 51 mm (3.1" x 5.8" x 2.0")

To Be Used With
PCI-1730, PCI-1733, PCI-1734, PCI-1750, PCI-1761

ADAM-3925
DB25 Wiring Terminal for DIN-rail Mounting

Features
- Low cost universal DIN-rail mounting screw terminal module for PC-LabCard products with DB25 connector.
- Screw-clamp terminal blocks allow easy and reliable connections.
- Case dimensions (W x L x H): 77.5 x 56.3 x 51 mm (3.1" x 2.2" x 2.0")

To Be Used With
PCL-725, PCL-740, PCL-746+, PCL-833

ADAM-3944
44-pin Wiring Terminal for DIN-rail Mounting

Features
- Low cost universal DIN-rail mounting screw terminal module for DA&C cards with DB44 female connector.
- Case dimensions (W x L x H): 77.5 x 203 x 51 mm (3.1" x 8" x 2.0")

To Be Used With
PCI-1736UP, PCI-1763UP

NEW
ADAM-3937
DB37 Wiring Terminal for DIN-rail Mounting

Features
- Low cost universal DIN-rail mounting screw terminal module for DA&C cards with DB37 female connector.
- Case dimensions (W x L x H): 77.5 x 146.3 x 51 mm (3.1" x 5.8" x 2.0")

To Be Used With
PCI-1730, PCI-1733, PCI-1734, PCI-1750, PCI-1761

NEW
ADAM-3944
44-pin Wiring Terminal for DIN-rail Mounting

Features
- Low cost universal DIN-rail mounting screw terminal module for DA&C cards with DB44 female connector.
- Case dimensions (W x L x H): 77.5 x 203 x 51 mm (3.1" x 8" x 2.0")

To Be Used With
PCI-1736UP, PCI-1763UP
ADAM-3900 Series

ADAM-3950
50-pin Flat Cable Wiring Terminal for DIN-rail Mounting

Features
- Low cost universal DIN-rail mounting screw terminal module for PC-LabCard™ products with 50-pin flat cable connector.
- Case dimensions (W x L x H): 77.5 x 146.3 x 51 mm (3.1" x 5.8" x 2.0")

To Be Used With
PCL-722, PCL-724, PCL-731

ADAM-3950D
Dual 50-pin SCSI-II Wiring Terminal for DIN-rail Mounting

Features
- Low cost universal DIN-rail mounting screw terminal module for industrial applications with dual 50-pin SCSII-II female connectors
- Case dimensions (W x L x H): 77.5 x 179.5 x 51 mm (3.1" x 7.1" x 2.0")

To Be Used With
PCI-1240, PCI-1752, PCI-1754, PCI-1756

ADAM-3950S
50-pin SCSI-II Wiring Terminal for DIN-rail Mounting

Features
- Low cost universal DIN-rail mounting screw terminal module for industrial applications with 50-pin SCSI-II female connector
- Case dimensions (W x L x H): 77.5 x 146.3 x 51 mm (3.1" x 5.8" x 2.0")

To Be Used With
PCI-1752, PCI-1754, PCI-1756

ADAM-3951
Wiring Terminal Module with LED indicators for DIN-rail Mounting

Features
- Low-cost DIN-rail mounting wiring terminal module for PCI-1752/1754/1756 with 50-pin SCSI-II female connector.
- Screw-clamp terminal blocks allow easy and reliable connections.
- Each LED indicates its current bi-directional I/O logic status with either green or red light.
- Case dimensions (W x L x H): 77.5 x 179.5 x 41.5 mm (3.1" x 7.1" x 1.6")

To Be Used With
PCI-1752, PCI-1754, PCI-1756

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Courtesy of Steven Engineering, Inc. ● 230 Ryan Way, South San Francisco, CA 94080-6370 ● General Inquiries: (800) 670-4183 ● www.stevenengineering.com
ADAM-3900 Series

**ADAM-3962**
DB62 Wiring Terminal for DIN-rail Mounting

**Features**
- Low cost universal DIN-rail mounting screw terminal module for DA&C cards with DB62 female connector
- Screw-clamp terminal blocks allow easy and reliable connections
- Case dimensions (W x L x H): 77.5 x 124.5 x 63.5 mm (3.1" x 4.9" x 2.5")

**To Be Used With**
PCI-1762

**ADAM-3968**
68-pin SCSI-II Wiring Terminal for DIN-rail Mounting

**Features**
- Low cost universal DIN-rail mounting screw terminal module for industrial applications with 68-pin SCSI-II female connector
- Case dimensions (W x L x H): 77.5 x 191.2 x 51 mm (3.1" x 7.5" x 2.0")

**To Be Used With**

**ADAM-3968/50**
68-pin SCSI-II to Two 50-pin Box Header for DIN-rail Mounting

**Features**
- Low cost universal DIN-rail mounting screw terminal module for PC-LabCard™ products with 68-pin SCSI-II connectors
- Converts one 68-pin SCSI-II connector to two 50-pin Opto-22 compatible box headers
- Case dimensions (W x L x H): 77.0 x 101.0 x 54.3 mm (3.0" x 4.0" x 2.1")

**To Be Used With**
PCI-1751, PCI-1753, PCI-1753E

**ADAM-3978**
DB78 Wiring Terminal for DIN-rail Mounting

**Features**
- Low cost universal DIN-rail mounting screw terminal module for DB78 female connector
- Case dimensions (W x L x H): 86 x 191 x 42 mm (3.39" x 7.51" x 1.65")

**To Be Used With**
MIC-3753, PCI-3756

**ADAM-3962**
DB62 Wiring Terminal for DIN-rail Mounting

**Features**
- Low cost universal DIN-rail mounting screw terminal module for DA&C cards with DB62 female connector
- Screw-clamp terminal blocks allow easy and reliable connections
- Case dimensions (W x L x H): 77.5 x 191.2 x 51 mm (3.1" x 7.5" x 2.0")

**To Be Used With**

**ADAM-3968**
68-pin SCSI-II Wiring Terminal for DIN-rail Mounting

**Features**
- Low cost universal DIN-rail mounting screw terminal module for industrial applications with 68-pin SCSI-II female connector
- Case dimensions (W x L x H): 77.5 x 191.2 x 51 mm (3.1" x 7.5" x 2.0")

**To Be Used With**

**ADAM-3968/20**
68-pin SCSI-II to Three 20-pin Wiring Terminal Module for DIN-rail Mounting

**Features**
- Low cost universal DIN-rail mounting screw terminal module for PC-LabCard™ products with 68-pin SCSI-II connectors
- Converts one 68-pin SCSI-II connector to three 20-pin connectors
- Case dimensions (W x L x H): 77.5 x 80 x 54.3 mm (3.1" x 3.2" x 2.1")

**To Be Used With**
PCI-1751, PCI-1753, PCI-1753E

**ADAM-39100**
100-pin SCSI-II Wiring Terminal for DIN-rail Mounting

**Features**
- Low cost universal DIN-rail mounting screw terminal module for industrial applications with 100 pin SCSI-II female connector
- Case dimensions (W x L x H): 80 x 230 x 42 mm (3.14" x 9.05" x 1.65")

**To Be Used With**
PCI-1755
**Cable Accessories**

- **PCL-1010B-1**
  BNC to BNC Cable, Male, 1m

- **PCL-101100-1**
  SCSI Cable 100P Male 1m w/ Bolt Screw

- **PCL-10120-1**
  20-Pin Flat Cable, 1m

- **PCL-10121-1**
  20-Pin Shielded Cable, 1m

- **PCL-10125-1**
  DB25 Cable Assembly, 1m

- **PCL-10137-1**
  DB37 Cable Assembly, 1m

- **PCL-10137H-1**
  High-speed DB37 Cable Assembly, 1m

- **PCL-10137H-3**
  High-speed DB37 Cable Assembly, 3m

- **PCL-10150-1.2**
  50-Pin Flat Cable, 1.2m

- **PCL-10151-1.2**
  50-Pin Flat Cable Assembly with Edge 1.2m

- **PCL-10162-1**
  DB62 Cable Assembly, 1m

- **PCL-10162-3**
  DB62 Cable Assembly, 3m

- **PCL-10168**
  68-Pin SCSI Cable, 1m

- **PCL-10168-2**
  68-Pin SCSI Cable, 2m

- **PCL-10250**
  100-Pin SCSI to Two 50-Pin SCSI Cable, 1m

- **PCL-10250-2**
  100-Pin SCSI to Two 50-Pin SCSI Cable, 2m

- **PCL-10251-1**
  100-Pin to Two 50-Pin SCSI Cable for PCI-1240, 1m

- **PCL-10251-1**
  100-Pin to Two 50-Pin SCSI Cable for PCI-1240, 1m

- **PCL-12250**
  100-Pin to Two 50-Pin Flat Cable for PCM-3240, 1m

- **PCL-12250-1**
  100-Pin to Two 50-Pin Flat Cable for PCM-3240, 1m

- **PCL-10268**
  100-Pin to Two 68-Pin SCSI Cable, 1m

- **PCL-10268-2**
  100-Pin to Two 68-Pin SCSI Cable, 2m

- **PCL-10901-1**
  DB9 to PS/2 Cable Assembly with Shielding, 1m

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Terminal Boards Dimensions

- **PCLD-780**
- **PCLD-782**
- **PCLD-782B**
- **PCLD-785**
- **PCLD-785B**
- **PCLD-786**
- **PCLD-788**
- **PCLD-789D**
- **PCLD-880**
- **PCLD-885**
- **PCLD-7216**
- **PCLD-8115**

Image of the terminal boards dimensions with specific measurements and diagrams for each model.