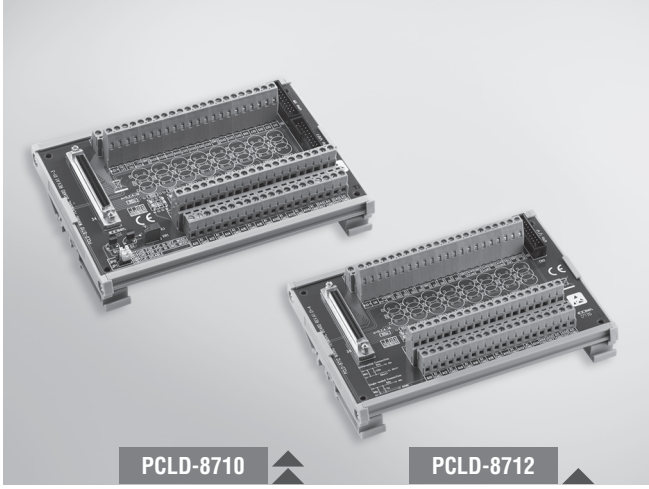
PCLD-8710
PCLD-8712

DIN-rail Wiring Terminal Board with CJC Circuit

DIN-rail Wiring Terminal for PCI-1712/L



Features

- Low-cost screw-terminal with 68-pin SCSI-II connector
- Onboard CJC (Cold Junction Compensation) circuits for direct thermocouple measurement (PCLD-8710)
- Reserved space for signal-conditioning circuits such as low-pass filter, voltage attenuator and current shunt
- Industrial-grade screw-clamp terminal blocks for heavy-duty and reliable connections
- DIN-rail mounting case for easy mounting
- Supports PCI-1710U/UL, PCI-1710HGU, PCI-1711U/UL, PCI-1716/L (PCLD-8710) and PCI-1712/1712L (PCLD-8712)

Introduction

The PCLD-8710 is designed to match multifunction cards with 68-pin SCSI-II connectors, such as the PCI-1710U/UL, PCI-1710HGU, PCI-1711U/UL, PCI-1716/L 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. The PCLD-8712 Screw-terminal Board provides convenient and reliable signal wiring for the PCI-1712/L of which has a 68-pin SCSI-II connector.

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

Applications

Field wiring for analog and digital I/O channels of PC-LabCard™ products.

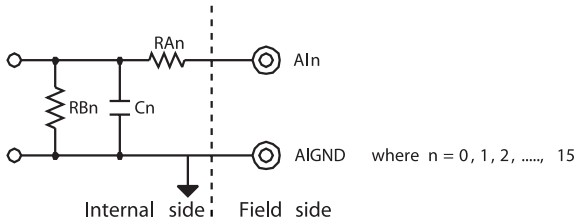
Signal conditioning circuits can be implemented as illustrated in the following examples:

a) Straight-through connection (factory setting)

RAn = 0 Ω (short)

RBn = none

Cn = none



b) 1.6 kHz (3 dB) low pass filter

RAn = 10 KΩ

RBn = none

Cn = 0.01 μF

$$f_{3dB} = \frac{1}{2\pi RAn.Cn}$$

c) 10 : 1 voltage attenuator:

RAn = 9 KΩ

RBn = 1 KΩ

Cn = none

Attenuation = $\frac{RBn}{RAn + RBn}$

(Assume source impedance << 10 KΩ)

d) 4 ~ 20 mA to 1 ~ 5 V_{DC} signal converter:

RAn = 0 Ω (short)

RBn = 250 Ω (0.1% precision resistor)

Cn = none

Ordering Information

PCLD-8710	DIN-rail Wiring Terminal Board with CJC Circuit
PCLD-8712	DIN-rail Wiring Terminal for PCI-1712/L
PCL-10120-1E	20-pin Flat Cable, 1 m
PCL-10120-2E	20-pin Flat Cable, 2 m
PCL-10168-1E	68-pin SCSI Shielded Cable, 1 m
PCL-10168-2E	68-pin SCSI Shielded Cable, 2 m

Last updated : 19-Mar-2014

L-TRONDIRECT

Your Success is Our Passion!

35 YEARS

www.L-TronDirect.com

800-830-9523

info@L-Tron.com

Get in touch with us on social media!

596 Fishers Station Dr | Victor, NY | 14564 | Suite 1 A

www.L-Tron.com