

INTRODUCTION

The PCLD-880 is an universal screw terminal board designed for field signal wiring in industrial applications. It can be connected to the analog and digital ports of various PC-LabCards through 20 pin flat cable or shielded cable with 37 pin D-type connector.

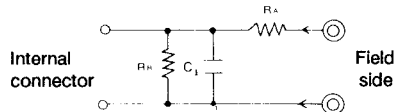
It was designed specifically to accommodate the requirements for passive signal conditioning components. For example, the user may easily implement low-pass filter, attenuator and current shunt functions by adding resistors and capacitors on the reserves circuit pads.

FEATURES

- Low-cost universal screw terminal board for industrial applications.
- Paper stickers provided for marking channel labels.
- 40 terminal points for two 20-pin flat cable connector ports or one DB-37 port.
- Reserved space for signal conditioning circuits like low-pass filter, current shunt and voltage attenuator.
- Industrial type terminal blocks permit heavy-duty and reliable connection of signals.
- Table-top mounting using nylon standoffs. Screws and washers provided for panel or wall mounting.
- Can be mounted inside the PCLC-ENC enclosure.
- Size: 221mm (L) x 115mm (W) (8.7" x 4.53")

APPLICATIONS

- Field wiring for analog and digital, input and output ports of PC-LabCard which employs either the standard 20-pin flat cable connector or the 37-pin D-type connector.
- Add signal conditioning circuits as examples given below:



- a) Straight-through connection (Factory Setting):

$R_A = 0$ ohm jumper
 $R_B = \text{none}$ (open)
 $C_1 = \text{none}$ (open)

- b) 1.6 KHZ (3 dB) low pass filter:

$R_A = 10\text{K}$ ohm
 $R_B = \text{none}$
 $C_1 = 0.01$ μF

$$f_{3\text{dB}} = \frac{1}{2\pi R_A C_1}$$

- c) 10:1 voltage attenuator:

$R_A = 9\text{K}$ ohm
 $R_B = 1\text{K}$ ohm
 $C_1 = \text{none}$

$$\text{Attenuation} = \frac{R_B}{R_A + R_B}$$

(Assume source impedance $\ll 10\text{K}$ ohm)

- d) 4-20 mA to 1-5 VDC signal converter:

$R_A = 0$ ohm jumper
 $R_B = 250$ ohm (0.1% precision resistor)
 $C_1 = \text{none}$

ORDERING INFORMATION

PCLD-880 Industrial Terminal Board

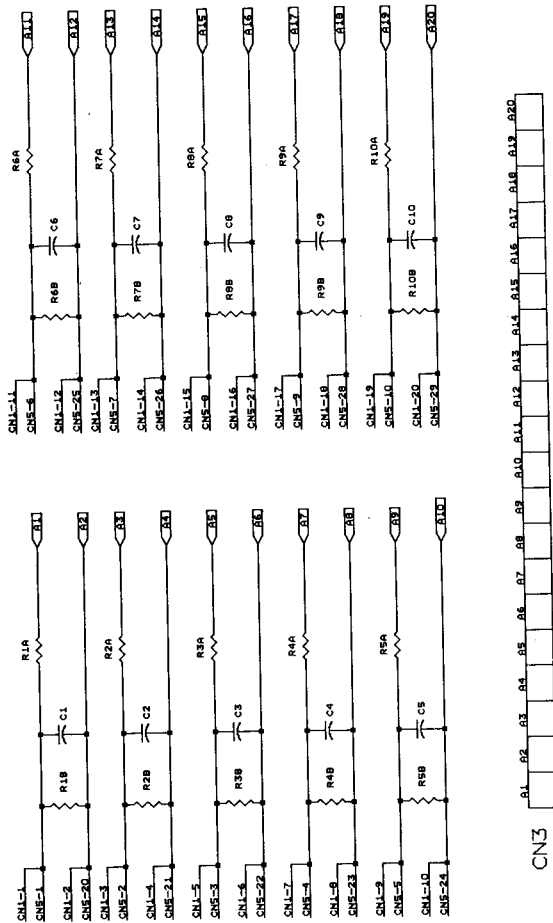
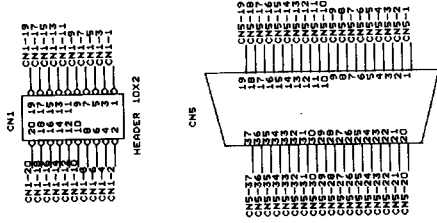
Accessories Furnished:

- Two 1 meter 20-pin flat cable assembly (P/N PCL-10120-1 x 2 ea)
- Nylon standoffs and screws for table top or panel mounting. Paper stickers for marking channel labels
- One PCL-10501 adapter(20-pin analog ports to 37-pin D connector)

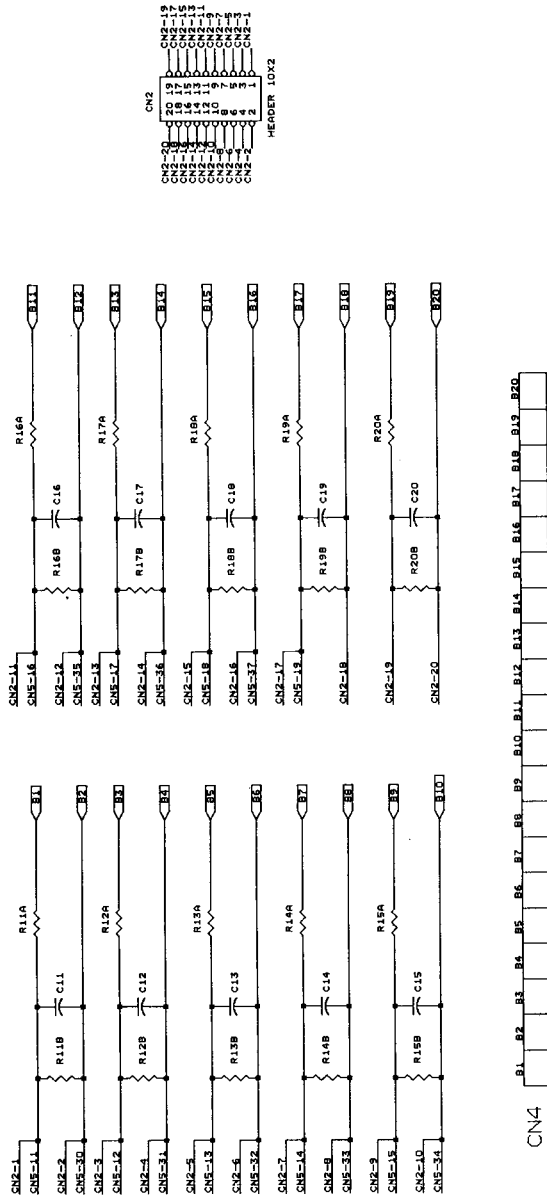
Accessories Available:

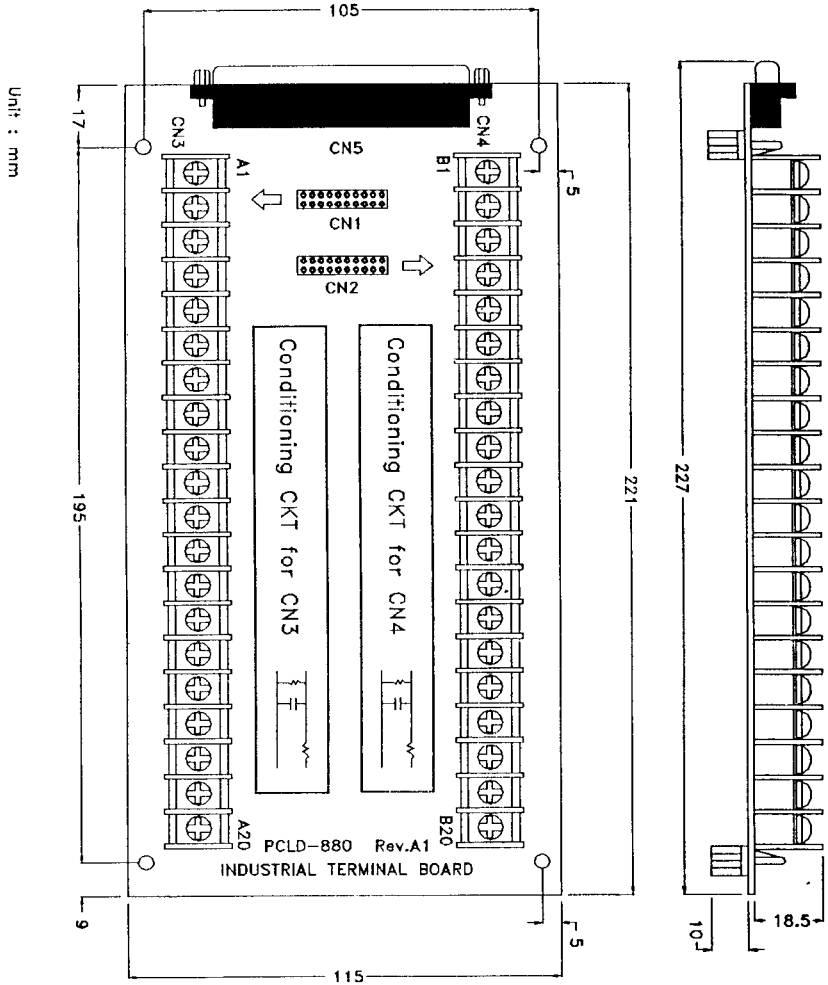
- PCLD-ENC : Enclosure box
- PCL-10120-2 : 20 pin flat cable assembly, 2m
- PCL-10120-0.7 : 20 pin flat cable assembly, 0.7m
- PCL-10370 : 37-pin D-type connector

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Unit : mm