# **PCLD-780 PCLD-880**

# **Screw Terminal Board with Flat Cables**

## Wiring Terminal Board with Flat Cables and Adapter



#### 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 DB37 connectors
- Industrial-grade terminal blocks (barrier-strip) permit heavy-duty and reliable connections
- Dimensions: 221 x 115 mm (8.7" x 4.5")

## Introduction

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

PCLD-780 and PCLD-880 let you install passive components on the special PCB layout to construct your own signal-conditioning circuits. 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<sup>™</sup> 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) RAn =  $0\Omega$  jumper



RBn = none Cn = none

#### b) 1.6 kHz (3dB) low pass filter

 $RAn = 10 K\Omega$  RBn = none  $Cn = 0.01 \mu F$   $f_{3dB} = \frac{1}{2\pi RAnCn}$ 

c) 10 : 1 voltage attenuator RAn = 9 K $\Omega$ RBn = 1 K $\Omega$ Cn = none Attenuation =  $\frac{RBn}{RAn + RBn}$ (Assume source impedance << 10 K $\Omega$ )

#### d) 4 ~ 20 mA to 1 ~ 5 $V_{\text{DC}}$ signal converter

RAn = 0  $\Omega$  (short) RBn = 250  $\Omega$  (0.1% precision resistor) Cn = none

#### **Pin Assignments**



# **Ordering Information**

PCLD-780	Screw Terminal Board w/ Two 20-pin Flat Cables
PCLD-880	Wiring Board w/ Two 20-pin Flat Cables & Adapter
PCL-10137-1	DB37 Cable, 1 m
PCL-10137-2	DB37 Cable, 2 m
PCL-10137-3	DB37 Cable, 3 m
PCL-10120-1	20-pin Flat Cable, 1 m
PCL-10120-2	20-pin Flat Cable, 2 m