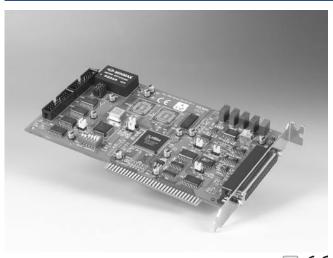
PCL-818HD/HG **PCL-818L**

100 kS/s, 12-bit, 16-ch ISA Multifunction Card 40 kS/s, 12-bit, 16-ch ISA **Multifunction Card**



Features

- 16 single-ended or 8 differential analog inputs
- 12-bit A/D converter, with up to 100 kHz sampling rate
- Programmable gain
- Automatic channel/gain scanning
- Onboard FIFO memory (1024 samples, PCL-818HD/HG only)
- One 12-bit analog output channel
- 16 digital inputs and 16 digital outputs
- Onboard programmable counter



RoHS

Introduction

The PCL-818L series was designed for entry-level models to the PCL-818 series. The cards have been designed with the cost-sensitive customer in mind, but still offers the same functions as the rest of the series, except that they have a 40 kHz sampling rate and only accepts bipolar inputs. They are fully software and connector compatible with the PCL-818HD and PCL-818HG. This lets you upgrade your applications to these higher performance cards without hardware or software changes.

The PCL-818LS bundle consists of the PCL-818L card, the PCLD-8115 wiring terminal board and a DB37 cable assembly. The PCLD-8115 accommodates onboard passive signal conditioning components (resistors and capacitors), allowing you to easily implement a low-pass filter, a voltage attenuator or a 4 ~ 20 mA voltage converter.

Specifications

Analog Input

Channels 16 single-ended, or 8 differential

Resolution

100 kS/s for all input ranges (PCL-818HD/HG only) Max. Sampling Rate

40 kS/s for all input ranges (PCL-818L only)

• Overvoltage Protection ±30 V_{DC} max. Input Impedance $10~\text{M}\Omega$

 Sampling Modes Software, pacer or external Input Range (V, software programmable)

Bipolar ±2.5 ±1.25 ±10 ±5 ±0.625 Accuracy (% of FSR ±1LSB) 0.2 0.1 0.1 0.2

Analog Output

Channels 12 bits Resolution Output Rate Static update

 Output Range (V, software programmable)

Internal Reference	Unipolar	0 ~ 5, 0 ~ 10
External Reference		0 ~ 10, 0 ~ -10

Digital Input

Channels Compatibility 5 V/TTL Input Voltage

Logic 0: 0.8 V max. Logic 1: 2.0 V min.

Digital Output

Channels 16 Compatibility 5 V/TTL

 Output Voltage Logic 0: 0.4 V max.

Logic 1: 2.4 V min. Sink: 8 mA

 Output Capability Source: -0.4 mA

Timer/Counter

Channels

 A/D Pacer 32-bit with 10 MHz or 1 MHz time base

Max. and Min. Rates 2.5 MHz to 0.00023 Hz

Counter One 16-bit counter with 100 kHz time base

General

+5 V @ 210 mA typical, 500 mA max. Power Consumption

+12 V @ 20 mA typical, 100 mA max. -12 V @ 20 mA typical, 40 mA max.

I/O Connector DB37-F

Box header 20P x 2

Dimensions (L x H) 155 x 100 mm (6.1" x 3.9")

Operating Temperature $0 \sim 50^{\circ} \text{ C } (32 \sim 122^{\circ} \text{ F})$ Storage Temperature -20 ~ 65° C (-4 ~ 149° F)

Operating Humidity 5 ~ 95% RH, non-condensing (refer to IEC 68-2-3)

Ordering Information

PCL-818HD High-performance half-size multi-function card
PCL-818HG High-performance and high-gain multi-function card
PCL-818L Low-cost high-performance half-size multi-function card

card

• **PCL-818LS** PCL-818L with PCLD-8115 and DB-37 cable assembly

(PCL-10137-1)

PCL-10137-1 DB37 cable assembly, 1 m
PCL-10137-2 DB37 cable assembly, 2 m
PCL-10137-3 DB37 cable assembly, 3 m

PCLD-8115 Industrial Wiring Terminal with CJC circuit and DB37

connector

• PCLD-880 Industrial Wiring Terminal with DB37 connector