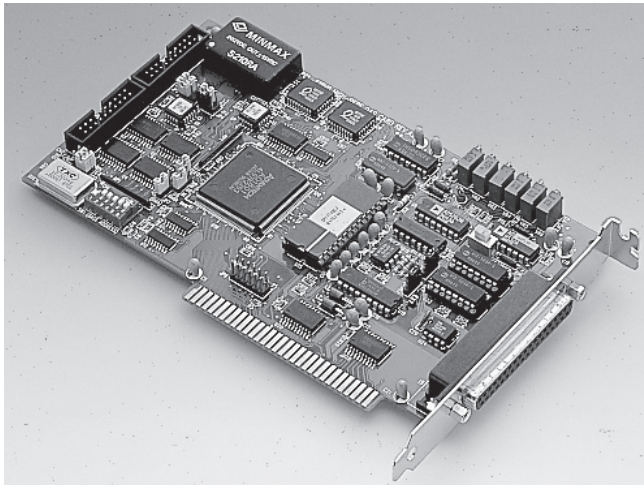


# PCL-818HD

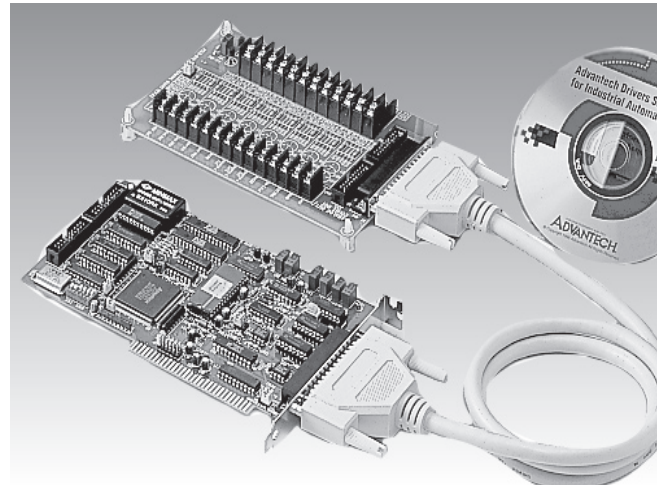
# PCL-818HG

## High-Performance Half-Size Multifunction Card

## High-Performance Multifunction Card



PCL-818HD



PCL-818HG



### Introduction

The PCL-818HD has guaranteed 100 kHz sampling and transfer speeds at all gains (x 1, 2, 4 or 8, programmable) and input ranges. It features an onboard 1 K sample FIFO (First In First Out) buffer for faster data transfer and more predictable performance under Windows.

### Specifications

#### Analog Input

- **Input Range (V)** Bipolar:  $\pm 10, \pm 5, \pm 2.5, \pm 1.25, \pm 0.625$   
Unipolar: 0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25
- **Maximum Sampling Rate** 100 kHz for all input ranges
- **Accuracy** Gain = 0.5, 1 0.01% of FSR  $\pm 1$  LSB  
Gain = 2, 4 0.02% of FSR  $\pm 1$  LSB  
Gain = 8 0.04% of FSR  $\pm 1$  LSB

#### General

- **On-board Memory** 1K samples FIFO for A/D. Can generate an interrupt when full or half full
- **Power Consumption** +5 V @ 500 mA max., +12 V @ 200 mA max
- **I/O Ports** 32 bytes with FIFO active or 16 bytes with FIFO disabled
- **A/D, D/A Connector** DB37
- **Dimensions (L x H)** 185 x 100 mm (7.3" x 3.9")

### Ordering Information

- **PCL-818HD** High-performance half-size multifunction card with DB-37 connector, user's manual and driver CD-ROM (cable not included)
- **PCL-10137-1** DB37 cable assembly, 1m
- **PCL-10137-2** DB37 cable assembly, 2m
- **PCL-10137-3** DB37 cable assembly, 3m
- **PCLD-8115** Industrial Wiring Terminal with CJC circuit and DB37 connector
- **PCLD-880** Industrial Wiring Terminal with DB37 connector

### Introduction

The PCL-818HG offers the same functions as the PCL-818HD, but it features a special high-gain programmable instrument amplifier for reading very low level input signals (x 0.5, 1, 5, 10, 50, 100, 500 or 1000).

The PCL-818HG package includes a special wiring board (PCLD-8115) with a DB-37 connector and CJC. This combination lets you measure low-level thermocouple signals without an external signal-conditioning board.

### Specifications

#### Analog Input

- **Conversion Time** 8  $\mu$ sec.
- **Input Range (V)** Bipolar:  $\pm 10, \pm 5, \pm 1, \pm 0.5, \pm 0.1, \pm 0.05, \pm 0.01, \pm 0.005$   
Unipolar: 0 ~ 10, 0 ~ 1, 0 ~ 0.1, 0 ~ 0.01
- **Maximum Sampling Rate** (depends on input amplifier settling time and slew rate)

Gain	Speed	Channels
0.5, 1	100 kHz	Single (input signal $\leq 3$ V p-p)
0.5, 1, 5, 10	35 kHz	Multiple
50, 100	7 kHz	Multiple
500, 1000	1 kHz	Multiple

- **Accuracy** Gain = 0.5, 1 0.01% of FSR  $\pm 1$  LSB  
Gain = 5, 10 0.02% of FSR  $\pm 1$  LSB  
Gain = 50, 100 0.04% of FSR  $\pm 1$  LSB  
Gain = 500, 1000 0.08% of FSR  $\pm 1$  LSB

#### General

See PCL-818HD

### Ordering Information

- **PCL-818HG** High-performance and High-gain multifunction card
- **PCL-10137-1** DB37 cable assembly, 1m
- **PCL-10137-2** DB37 cable assembly, 2m
- **PCL-10137-3** DB37 cable assembly, 3m
- **PCLD-8115** Industrial Wiring Terminal with CJC circuit and DB37 connector
- **PCLD-880** Industrial Wiring Terminal with DB37 connector