



## PCL-818L 40-kHz DAS Card

The PCL-818L is the entry-level model in the PCL-818 series. We designed it with the cost-sensitive customer in mind. It offers the same functions as the rest of the series, except that it has a 40 kHz sampling rate and only accepts bipolar inputs. It is 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

The PCL-818LS bundle consists of the PCL-818L card, the PCLD-8115 wiring terminal board and a DB-37 cable assembly. The PCLD-8115 accommodates on-board 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

- **Conversion time:** 25 msec.
- **Input range (V):** Bipolar:  $\pm 10$ ,  $\pm 5$ ,  $\pm 2.5$ ,  $\pm 1.25$ ,  $\pm 0.625$
- **Maximum data throughput:** 40 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

- **Power consumption:** +5 V @ 210 mA typical, 500 mA max.  
+12 V @ 20 mA typical, 100 mA max.  
-12 V @ 20 mA typical, 40 mA max.
- **I/O ports:** 16 consecutive bytes
- **A/D, D/A connector:** DB-37
- **Dimensions:** 155 mm (L) x 100 mm (H) (6.1" x 3.9")

## PCL-818H General-purpose DA&C Card with 20-pin Connectors

The PCL-818H is a 100 kHz DAS card with standard PCL-818 series features. It attaches directly to signal-conditioning boards with 20-pin flat-cable connectors. The PCL-818H is a half-size card that uses the Advantech ASIC chip.

## Specifications

### Analog Input

- **Conversion time:** 8 msec.
- **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 data throughput:** 100 kHz
- **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

- **Power Consumption:** +5 V @ 180 mA typical, 500 mA max.  
+12 V @ 140 mA typical, 200 mA max.  
-12 V @ 14 mA typical, 20 mA max.
- **I/O ports:** 16 consecutive bytes
- **A/D, D/A connector:** 20-pin flat cable
- **Dimensions:** 185 mm (L) x 100 mm (H) (7.3" x 3.9")