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Data Sheet
August 13, 2026

KEITHLEY

Keithley KPCI-1802HC PCI Bus Data Acquisition Board

Applications PCI high-channel voltage monitoring Burst acquisition with 2048-sample FIFO Replacement of DAS-1802HC without ISA Automated test analog I/O Key Features PCI plug and play versus ISA DIP addressing 2048-sample A/D FIFO 64/32 analog input density DriverLINX code path from DAS-1800HC Low-gain 1802 versus high-gain 1801 Technical Specifications Model: KPCI-1802HC Manufacturer: Keithley Instruments Instrument Type: PCI multifunction high channel DAQ board Alias: KPCI-1802HC; KPCI1802HC Host Bus: PCI Analog Inputs: 64 single ended or 32 differential ADC Resolution: 12 bit Input Gains: 1, 2, 4, 8 (low gain) Input Ranges Gain 1: plus/minus 10 V, plus/minus 5 V, plus/minus 2.5 V, plus/minus 1.25 V bipolar; 0 to 10 V unipolar class Single Channel Throughput: about 333 kS/s Scanning Throughput: about 312.

MODEL Keithley KPCI-1802HC	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU KPCI-1802HC	LISTING https://aumictechlabs.com/products/kpci-1802hc-2/

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keithley KPCI-1802HC is a PCI bus data acquisition board engineered for industrial and scientific applications demanding simultaneous multi-channel analog input and output. The board acquires data at up to 333 kS/s per channel with 12-bit resolution and configurable differential or

single-ended input architecture. On-board FIFO buffering, programmable gain switching, and multiple data transfer modes enable continuous operation in signal processing and data logging systems. Technical Specifications Analog Inputs 32 differential or 64 single-ended channels (software configurable) 12-bit resolution; 2048-sample FIFO buffer Single-channel throughput: 333 kS/s; aggregate scanning: 312.5 kS/s Gain settings: 1, 2, 4, 8 (software selectable via 64-entry channel gain queue) Bipolar ranges: ±10 V (Gain 1), ±5 V (Gain 2), ±2.5 V (Gain 4), ±1.25 V (Gain 8) Unipolar ranges: 0–10 V (Gain 1), 0–5 V (Gain 2), 0–2.5 V (Gain 4), 0–1.25 V (Gain 8) Input overvoltage protection: ±15 V continuous (powered or unpowered) Input bias current: ±40 nA max. @ 25°C; ±60 nA max. over operating range Input impedance: >100 MΩ in parallel with ≤90 pF Linearity: ±1 LSB integral max. Common mode rejection: 74 dB (Gain 1), 79 dB (Gains 2–4), 84 dB (Gain 8) DC–60 Hz typical Analog Outputs 2 channels; 12-bit resolution Range: ±10 V; ±5 mV typical accuracy (high impedance load) Output impedance: 4 Ω; maximum current: ±5 mA Maximum capacitive load: 100 µF; FIFO buffer: 16 samples Timing and Data Transfer Internal pacer clock: 0.0012 Hz to 333 kHz External pacer clock: up to 333 kHz DMA (PCI bus master), interrupt, and polled transfer modes supported Programmable burst mode with configurable channel scan intervals Power and Interface Power supply: +5 V, ±15 V required for external circuits PCI bus interface Key Features High-speed continuous data acquisition with on-board FIFO buffering Bus mastering DMA for efficient multi-channel transfers Channel gain queue enables non-sequential scanning at different gains Programmable burst mode emulates simultaneous sample-and-hold across channel scans Flexible triggering and gating control Typical Applications Complex signal processing and data logging tasks Multi-channel sensor data acquisition with varying signal ranges Industrial process monitoring and control systems Research instrumentation requiring high-speed analog I/O Compatibility & Integration Connects directly to PCI bus architecture. Supports differential and single-ended sensor inputs, accommodating standard signal conditioning chain requirements across DC to low-frequency applications.

KPCI1802HC Characteristics / Specifications

PARAMETER	VALUE
Model	KPCI-1802HC
Manufacturer	Keithley Instruments
Instrument Type	PCI multifunction high channel DAQ board
Alias	KPCI-1802HC; KPCI1802HC
Host Bus	PCI
Analog Inputs	64 single ended or 32 differential
ADC Resolution	12 bit
Input Gains	1, 2, 4, 8 (low gain)
Input Ranges Gain	plus/minus 10 V, plus/minus 5 V, plus/minus 2.5 V, plus/minus 1.25 V bipolar; 0 to 10 V unipolar class
Single Channel Throughput	about 333 kS/s
Scanning Throughput	about 312.5 kS/s class
AD FIFO	2048 samples (KPCI class)
Channel Gain Queue	64 entries class
Analog Outputs	2 channels, 12 bit, plus/minus 10 V
Digital IO	digital inputs and outputs family
Trigger Gate	external trigger and gate
Software	DriverLINX
Related High Gain	KPCI-1801HC gains 1, 5, 50, 250
Related ISA	DAS-1802HC (1024 FIFO)
Form	PCI card
Data Transfer	bus mastering/DMA class
SSH Option	simultaneous sample-and-hold accessory class Notes Specs from Keithley DAS-1800HC / KPCI-1800HC family (existing DAS-1802HC OEM notes: KPCI-1802HC shares 1802HC gains, PCI bus, 2048 FIFO). Confirm KPCI-1802HC low gain versus KPCI-1801HC high gain.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

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Related ISA	DAS-1802HC (1024 FIFO)
Form	PCI card
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SSH Option: simultaneous sample-and-hold accessory class

Notes

Specs from Keithley DAS-1800HC / KPCI-1800HC family (existing DAS-1802HC OEM notes: KPCI-1802HC shares 1802HC gains, PCI bus, 2048 FIFO). Confirm KPCI-1802HC low gain versus KPCI-1801HC high gain.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

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