

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

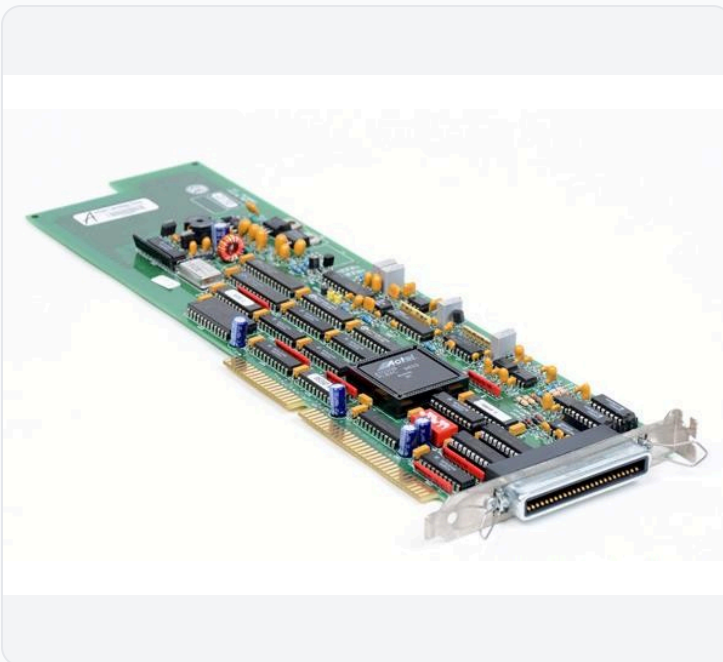
Data Sheet

August 13, 2026

KEITHLEY

Keithley DAS-1801HC 12-Bit Multifunctional I/O Board

Applications High-channel millivolt and transducer ISA acquisition Burst sampling with FIFO 64-channel process monitoring at high gain Legacy DAS-16 high-gain expansion Key Features HC density 64 SE / 32 DIFF High-gain 1/5/50/250 versus 1802HC 1/2/4/8 1024-sample FIFO Two analog outputs DriverLINX Technical Specifications Model: DAS-1801HC Manufacturer: Keithley Instruments (MetraByte / Astro-Med catalog co-listings) Instrument Type: ISA high gain high channel data acquisition board Alias: DAS-1801HC; DAS1801HC Host Bus: ISA AT 16 bit Analog Inputs: 64 single ended or 32 differential ADC Resolution: 12 bit Input Gains: 1, 5, 50, 250 (high gain) Single Channel Throughput: about 333 kS/s Scanning Throughput: about 312.



MODEL

Keithley DAS-1801HC

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

DAS-1801HC

LISTING

<https://aumictechlabs.com/products/das-1801hc-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keithley DAS-1801HC is a 12-bit multifunctional I/O board engineered for data acquisition and control in industrial, scientific, and laboratory environments. It delivers continuous, gap-free sampling through dual-channel DMA and onboard FIFO buffers, supporting up to 64 single-ended or 32 differential analog input channels with software-configurable gains and input ranges. The board integrates 2 waveform-quality analog outputs, 4 digital inputs, and 8 digital outputs with

strobe signaling, making it suitable for precision measurement and system automation across diverse applications.

Technical Specifications

Analog Input Performance

Resolution: 12-bit

Channel Configuration: 64 single-ended or 32 differential channels (software-selectable)

Single-Channel Sampling Rate: Up to 333 kS/s

Aggregate Sampling Rate: Up to 312.5 kS/s

Input FIFO Buffer: 1024 words

Channel/Gain Queue: 64 locations for non-sequential and variable-gain sampling

Gain and Range Options (Model 01)

Programmable Gains: 1, 5, 50, 250

Input Ranges: ± 5 V, ± 1 V, ± 100 mV, ± 20 mV

Gain and Range Options (Model 02)

Programmable Gains: 1, 2, 4, 8

Input Ranges: ± 10 V, ± 5 V, ± 1.25 V

Analog Output Performance

Output Channels: 2 waveform-quality outputs

D/A Update Rate: 500 kS/s

Output FIFO Buffer: 2048 locations

Noise Characteristics

Bipolar (Gain 1): 1 V p-p, 0.1 V rms

Unipolar (Gain 5): 1 V p-p, 0.1 V rms

Bipolar (Gain 50): 4 V p-p, 0.4 V rms

Unipolar (Gain 250): 4 V p-p, 0.4 V rms

Digital I/O

Digital Inputs: 4

Digital Outputs: 8 with strobe signal

Power Supply Available Rails: +5 V, -15 V, +15 V at connector

Bus and Data Transfer Interface: 16-bit AT bus data transfers

Connector: 100-pin D-type (rear panel)

Key Features

Continuous sampling with dual-channel DMA eliminates data gaps

Flexible channel configuration supports single-ended and differential input topologies

High-speed queue processing enables rapid gain and channel switching

Dual FIFO buffers optimize data throughput and latency performance

Strobe-controlled digital outputs simplify external circuit integration

Typical Applications

Multi-channel sensor data acquisition and logging

Real-time process control and automation

Precision test and measurement systems

Laboratory instrumentation platforms

Industrial monitoring and diagnostics

Compatibility & Integration

Computer Systems IBM PC AT and compatible computers

Windows and DOS operating environments

Software Bundled LabVIEW VIs (National Instruments compatible)

Includes start-up utility for rapid board configuration

DriverLIN support

DAS1801HC Characteristics / Specifications

PARAMETER	VALUE
Model	DAS-1801HC
Manufacturer	Keithley Instruments (MetraByte / Astro-Med catalog co-listings)
Instrument Type	ISA high gain high channel data acquisition board
Alias	DAS-1801HC; DAS1801HC
Host Bus	ISA AT 16 bit
Analog Inputs	64 single ended or 32 differential
ADC Resolution	12 bit
Input Gains	1, 5, 50, 250 (high gain)
Single Channel Throughput	about 333 kS/s
Scanning Throughput	about 312.5 kS/s
AD FIFO	1024 samples
Channel Gain Queue	64 entries
Analog Outputs	2 channels, 12 bit, plus/minus 10 V
Digital IO	digital inputs and outputs family
Data Transfer	DMA channels 5/6/7 or interrupt
Software	DriverLINX
Related Low Gain	DAS-1802HC gains 1, 2, 4, 8
Related PCI	KPCI-1801HC
Trigger Gate	external
Form	full length ISA class
SSH Option	simultaneous sample-and-hold accessory class
Input Range Gain	plus/minus 10 V / 0 to 10 V class Notes

DAS1801HC Specifications

PARAMETER	VALUE
Burst sampling with FIFO	64-channel process monitoring at high gain
Key Features	HC density 64 SE / 32 DIFF
Technical Specifications	Model: DAS-1801HC

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	
Specifications	
PARAMETER	VALUE
Model	DAS-1801HC
Manufacturer	Keithley Instruments (MetraByte / Astro-Med catalog co-listings)
Instrument Type	ISA high gain high channel data acquisition board
Specifications	
PARAMETER	VALUE
Alias	DAS-1801HC; DAS1801HC
Host Bus	ISA AT 16 bit
Analog Inputs	64 single ended or 32 differential
Specifications	
PARAMETER	VALUE
ADC Resolution	12 bit
Input Gains	1, 5, 50, 250 (high gain)
Single Channel Throughput	about 333 kS/s
Specifications	
PARAMETER	VALUE
Scanning Throughput	about 312.5 kS/s
AD FIFO	1024 samples
Channel Gain Queue	64 entries
Specifications	
PARAMETER	VALUE
Analog Outputs	2 channels, 12 bit, plus/minus 10 V
Digital IO	digital inputs and outputs family
Data Transfer	DMA channels 5/6/7 or interrupt

Specifications

PARAMETER	VALUE
Software	DriverLINX
Related Low Gain	DAS-1802HC gains 1, 2, 4, 8
Related PCI	KPCI-1801HC

Specifications

PARAMETER	VALUE
Trigger Gate	external
Form	full length ISA class
SSH Option	simultaneous sample-and-hold accessory class

Input Range Gain 1: plus/minus 10 V / 0 to 10 V class

Notes

Specs from Keithley DAS-1800HC family (existing DAS-1802HC OEM file: DAS-1801HC high-gain sibling gains 1, 5, 50, 250). Confirm 1801HC versus 1802HC before setting millivolt ranges.

Available from Aumictech

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

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 13, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.