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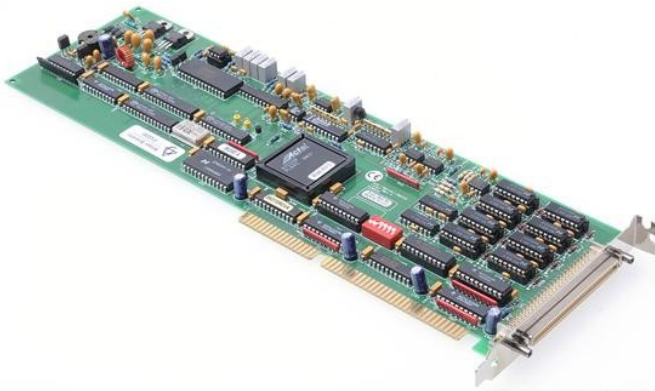
Data Sheet

August 13, 2026

KEITHLEY

Keithley DAS-1802HR-DA 16-Bit Multifunctional I/O Board

The Keithley DAS-1802HR-DA is a high-resolution, 16-bit multifunctional analog and digital I/O board designed for data acquisition and control applications. It features analog inputs, analog outputs, and digital I/O lines, providing versatile connectivity for a wide range of instrumentation and control tasks. It is ideal for precision measurement, automated testing, and process control systems.



MODEL

Keithley DAS-1802HR-DA

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

DAS-1802HR-DA

LISTING

<https://aumictechlabs.com/products/das-1802-hr-da-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keithley DAS-1802HR-DA is a 16-bit multifunctional I/O board engineered for precision data acquisition and automated control in laboratory and production test environments. It combines dual 16-bit analog outputs, high-resolution single-ended analog inputs, and mixed-signal digital I/O into a compact PCI/ISA/PCMCIA form factor, delivering the analog and digital connectivity required for instrumentation integration without compromise on measurement accuracy. Technical Specifications Analog Inputs 16-bit resolution at up to 100 kS/s sampling rate Single-ended configuration with four programmable gain settings (1, 2, 4, 8×) Overvoltage protection: continuous ± 35 V on any single channel Input impedance: 100 nA maximum at 25 °C Sample-and-

hold acquisition: 10 μ s to 0.1% full-scale step Gain drift: ± 50 ppm/ $^{\circ}$ C of full-scale maximum Zero drift: ± 10 μ V/ $^{\circ}$ C maximum Analog Outputs Two independent 16-bit DAC channels, 2's complement coding Output range: -10.0000 V to $+9.999695$ V Update rate: 500 kS/s Integral nonlinearity: ± 1 LSB typical, ± 2 LSBs maximum Differential nonlinearity: ± 1 LSB typical, ± 2 LSBs maximum Monotonic across all 16 bits Digital I/O 3 LSTTL inputs: VIL 0.8 V max, VIH 2.0 V minimum 4 standard LSTTL outputs: VOL 0.5 V max at 8 mA, VOH 2.4 V minimum at -400 μ A Memory & Support 1024-location input FIFO buffer Expandable to 256 analog inputs via external chaining 256-location gain-channel queue $+5.0$ V ± 0.2 V reference output at ± 2 mA load capacity and 50 ppm/ $^{\circ}$ C temperature coefficient Key Features Rear-panel 50-pin D-type connector consolidates all analog and digital I/O Compact footprint: 4.25 in $\times$ 5.0 in (10.8 cm $\times$ 12.7 cm), 4 oz (120 g) Operating temperature: 0 to 50 $^{\circ}$ C; storage -20 to $+70$ $^{\circ}$ C Configured via DriverLINX utility; compatible with standard data acquisition software packages Typical Applications Automated test systems requiring simultaneous analog measurement and control Laboratory data logging with programmable gain switching Process monitoring and equipment characterization Sensor interfacing in mixed-signal environments Compatibility & Integration Supports PCI, ISA, and PCMCIA bus architectures. Designed for Installation Category I and II per IEC 60664, suited for measurement and control signals at non-mains potential.

DAS1802HRDA Characteristics / Specifications

PARAMETER	VALUE
Model	DAS-1802HR-DA
Manufacturer	Keithley Instruments (MetraByte / Astro-Med catalog co-listings)
Instrument Type	ISA 16 bit multifunction DAQ with dual DAC
Alias	DAS-1802HR-DA; DAS1802HRDA
Host Bus	ISA AT 16 bit data transfers
Analog Inputs	16 single ended or 8 differential software selectable
ADC Resolution	16 bits (1 part in 65536)
Data Format	16 bit 2s complement
Input Gains	1, 2, 4, 8
Unipolar Ranges	0 to 10 V, 0 to 5 V, 0 to 2.5 V, 0 to 1.25 V
Bipolar Ranges	plus/minus 10 V, plus/minus 5 V, plus/minus 2.5 V, plus/minus 1.25 V
Absolute Accuracy Typical	0.005 percent of reading plus/minus 1 LSB all ranges
Single Channel Throughput	100 ksamples/s
Multi Channel Same Gain	98 ksamples/s
Multi Channel Gain Change	60 ksamples/s (gains 1 to 8)
FIFO Size	1024 word
Channel QRAM	256 locations
AD Conversion Time	8.0 us maximum
Acquisition Time	2 us
Input Impedance	100 Mohm parallel 75 pF
CMRR	100 dB for gains 1, 2, 4, 8
Input Overvoltage	plus/minus 15 V continuous powered and unpowered
Analog Outputs	2
DAC Resolution	16 bit
DAC Coding	16 bit 2s complement

PARAMETER	VALUE
DAC Output Range	10.0000 V to plus 9.999695 V (plus/minus 10 V class)
DAC Absolute Accuracy	plus/minus 2 LSB at 25 C
DAC Settling Time	100 us to plus/minus 1 LSB (less than 100 pF load)
DAC Output Current	plus/minus 5 mA (about 25 mA short circuit)
DAC Capacitive Load	100 uF
DAC Glitch Energy Area	15 nV times seconds
Digital IO	4 bit digital input port; 4 bit latched digital output port
DMA Levels	5, 6, 7
Internal Pacer Maximum	100 kHz (HR); minimum 0.0012 Hz class
Related Without AO	DAS-1802HR
Related 12 Bit ST DA	DAS-1802ST-DA (four 12 bit DACs)
Software	DriverLINX

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 Without A0	DAS-1802HR
Related 12 Bit ST DA	DAS-1802ST-DA (four 12 bit DACs)
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Notes

Specs from Keithley DAS-1800ST/HR Series User's Guide Appendix A (Tables A-2 and A-4). Confirm HR-DA (16 bit ADC, two 16 bit DACs) versus ST-DA (12 bit ADC, four 12 bit DACs). SSH-8 is not supported on HR boards.

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

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NIST-traceable calibration · SAM registered ·
30-day returns
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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.