

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

KEITHLEY

Keithley DAS-1602 12-Bit Multifunction Board

The Keithley DAS-1602 is a 12-bit multifunction analog and digital I/O board designed for data acquisition and control applications. It features multiple analog input channels, digital I/O lines, and timing capabilities, providing a versatile solution for interfacing with sensors, actuators, and other external devices.



MODEL

Keithley DAS-1602

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

DAS-1602

LISTING

<https://aumictechlabs.com/products/das-1602-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keithley DAS-1602 is a 12-bit multifunction data acquisition board that integrates analog input, analog output, and digital I/O in a single interface card. It delivers up to 100 kSamples/s throughput with software-selectable input configurations - 16 single-ended or 8 differential channels - making it suitable for sensor acquisition and real-time control tasks. The board supports DMA-based data transfer for high-speed applications and maintains backward compatibility with the DAS-16G Series. Technical Specifications Analog Input Resolution: 12 bits Channels: 16 single-ended or 8 differential (software-selectable) Maximum sampling rate: 100 kSamples/s Conversion time: 8 μ s max (7.5 μ s typical) Acquisition time: 1.4 μ s Input ranges: ± 10 V, 0 to +10 V, ± 5 V, ± 2.5 V, ± 1.25 V, 0 to 5 V, 0 to 2.5 V, 0 to 1.25 V Programmable gain: 1, 2, 4, 8 Input impedance: Greater than 25 M Ω minimum Input current: 250 nA maximum at 25°C Linearity: ± 1 bit Accuracy: 0.01% of reading ± 1 bit Overvoltage protection: ± 35 V powered, ± 20 V unpowered

CMRR @ 60 Hz: -100 dB typical, -80 dB minimum Gain drift: ± 50 ppm/ $^{\circ}\text{C}$ maximum of full scale Zero drift: ± 10 $\mu\text{V}/^{\circ}\text{C}$ ± 50 $\mu\text{V}/\text{gain}$ (unipolar) Analog Output Channels: Two 12-bit D/A channels Output ranges: -5 V to +5 V factory-configured; 0 to 5 V, 0 to 10 V, ± 5 V, ± 10 V with external reference Output drive current: ± 5 mA maximum Settling time: 20 μs to 0.01% Output impedance: Less than 0.1 Ω Linearity: ± 0.5 bit Digital I/O Lines: 32 digital I/O Configuration: Two 8-bit and two 4-bit banks per 82C55 controller Output drive current: ± 5 mA maximum Logic levels: 2.0 to 5.0 V high, -0.5 to 0.8 V low Key Features DMA-capable high-speed data transfer Guaranteed monotonicity across operating temperature Differential and single-ended input modes Offset binary (bipolar) and true binary (unipolar) coding Backward compatible with DAS-16G Series Typical Applications Multi-channel sensor data logging, process control, real-time monitoring systems, and mixed-signal I/O applications requiring simultaneous analog and digital signal conditioning.

DAS1602 Characteristics / Specifications

PARAMETER	VALUE
Model	DAS-1602
Manufacturer	Keithley Instruments (MetraByte)
Instrument Type	ISA analog and digital I/O board
Alias	DAS-1602; DAS1602
Host Bus	ISA PC/XT AT
Analog Inputs	16 single ended or 8 differential
ADC Resolution	12 bit
Sample Rate	100 kS/s
Input Gains	1, 2, 4, 8 (low gain)
Bipolar Span Gain	plus/minus 10 V
Unipolar Span Gain	0 to 10 V
Analog Outputs	2
Digital IO	24 lines (ports A/B/C class)
Counters	timer/counter subsystem family
DMA	switch selectable channel
Base Address	switch 16-byte boundaries
Interrupts	software configurable
Software	DriverLINX
Related High Gain	DAS-1601 gains 1, 10, 100, 500
Related No AO	DAS-1402
Related Predecessor	DAS-16G2
Connector	37 pin DAS-16 compatible class
Form	full length ISA class

PARAMETER	VALUE
Throughput Note	100 ksamples/s with 12 bit resolution Notes Specs from Keithley DAS-1600/1400 Series User Guide (DAS-1602 low gain 1/2/4/8, 16 SE/8 DIFF, 100 kS/s, 12 bit, two AO). Confirm DAS-1602 versus DAS-1601 gain set before ranging sensors.

DAS1602 Specifications

PARAMETER	VALUE
Applications	ISA 100 kS/s data acquisition
Automated test with analog stimulus	DAS-16G2 replacement with two analog outputs retained
Switch SE/DIFF and uni/bipolar	Two analog outputs (unlike DAS-1402)
Technical Specifications	Model: DAS-1602

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-1602
Manufacturer	Keithley Instruments (MetraByte)
Instrument Type	ISA analog and digital I/O board
Specifications	
PARAMETER	VALUE
Alias	DAS-1602; DAS1602
Host Bus	ISA PC/XT AT
Analog Inputs	16 single ended or 8 differential
Specifications	
PARAMETER	VALUE
ADC Resolution	12 bit
Sample Rate	100 kS/s
Input Gains	1, 2, 4, 8 (low gain)
Specifications	
PARAMETER	VALUE
Bipolar Span Gain 1	plus/minus 10 V
Unipolar Span Gain 1	0 to 10 V
Analog Outputs	2
Specifications	
PARAMETER	VALUE
Digital IO	24 lines (ports A/B/C class)
Counters	timer/counter subsystem family
DMA	switch selectable channel

Specifications

PARAMETER	VALUE
Base Address	switch 16-byte boundaries
Interrupts	software configurable
Software	DriverLINX

Specifications

PARAMETER	VALUE
Related High Gain	DAS-1601 gains 1, 10, 100, 500
Related No AO	DAS-1402
Related Predecessor	DAS-16G2

Specifications

PARAMETER	VALUE
Connector	37 pin DAS-16 compatible class
Form	full length ISA class
Throughput Note	100 ksamples/s with 12 bit resolution

Notes

Specs from Keithley DAS-1600/1400 Series User Guide (DAS-1602 low gain 1/2/4/8, 16 SE/8 DIFF, 100 kS/s, 12 bit, two AO). Confirm DAS-1602 versus DAS-1601 gain set before ranging sensors.

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.