

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

KEITHLEY

Keithley DDA-16 16-Channel, 12-Bit ISA-BUS Analog Output Module

Keithley MetraByte DDA-16 16 Channel 12 Bit ISA Analog Output Board The Keithley MetraByte DDA-16 is a 16-channel, 12-bit ISA analog output board in the DDA-08/16 family. Channels are grouped in fours; each group is jumper-selected for voltage (0 to 10 V, 0 to 5 V, plus/minus 2.5 V, plus/minus 5 V, plus/minus 10 V) or 4 to 20 mA current. Internal and external pacer clocks update the DACs. Sibling DDA-08 is the 8-channel board sharing the same register map and DriverLINX package. STA-U and related screw-terminal accessories attach through the family cable. A register-level programming guide supplements the user's guide for applications that do not use DriverLINX. The Keithley MetraByte DDA-16 is a 16-channel, 12-bit ISA analog output board in the DDA-08/16 family. Channels are grouped in fours; each group is jumper-selected for voltage (0 to 10 V, 0 to 5 V, plus/minus 2.5 V, plus/minus 5 V, plus/minus 10 V) or 4 to 20 mA current. Internal and external pacer clocks update the DACs. Sibling DDA-08 is the 8-channel board sharing the same register map and DriverLINX package. STA-U and related screw-terminal accessories attach through the family cable. A register-level programming guide supplements the user's guide for applications that do not use DriverLINX. Multi-channel setpoint and waveform analog output on ISA PCs; 4 to 20 mA loops in groups of four; drop-in 16-channel analog g



MODEL

Keithley DDA-16

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

DDA-16

LISTING

<https://aumictechlabs.com/products/dda-16-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keithley DDA-16 is a 16-channel, 12-bit analog output module for ISA-bus systems, delivering precise voltage and current outputs for industrial control, instrumentation, and dynamic calibration tasks. Four quad DAC4815 converters provide guaranteed monotonicity with ± 1 bit integral and differential linearity across selectable output ranges of 0–5V, 0–10V, ± 2.5 V, ± 5 V, and ± 10 V, plus 4–20mA current mode. The module settles in $<10\mu\text{s}$ to 0.01% full-scale step and supports programmable update rates from 50 kSamples/s to 0.004 Samples/s, enabling synchronized multi-channel writes and external clock integration. Hardware trigger/gate inputs and programmable output clock signals accommodate system synchronization, while automatic interrupts flag output updates. All channels power up to 0V or 0mA to protect downstream circuitry. Technical Specifications Channels: 16 independent analog outputs via 4 quad DACs Resolution: 12-bit Linearity: ± 1 bit integral; ± 1 bit differential; monotonicity guaranteed Temperature Stability: 15 ppm full-scale range/ $^{\circ}\text{C}$ maximum offset drift Output Ranges: 0–5V, 0–10V, ± 2.5 V, ± 5 V, ± 10 V, 4–20mA Load Current: ± 15 mA minimum, ± 30 mA maximum Output Impedance: $0.1\ \Omega$ typical Settling Time: $<10\ \mu\text{s}$ to 0.01% full-scale step (100 pF typical) Bipolar Output Accuracy: ± 20 mV maximum Update Rate: 50 kSamples/s to 0.004 Samples/s, programmable via $1\ \mu\text{s}$ –1 s prescaler and 8-bit counter Power Supply: +5V (320 mA typical, 480 mA max); ± 12 V (132 mA typical, 185 mA max, no load current) Key Features Programmable pacer clock with internal (50 kSamples/s to 0.004 Samples/s) or external sources Simultaneous multi-channel output updates Hardware trigger/gate input for output enable/disable control Programmable output clock signal with selectable polarity and delay Automatic interrupt generation on output updates Safe power-up state: all channels default to 0V or 0mA Typical Applications Dynamic calibration systems X-Y table control Strip chart recorder interfacing Pressure valve control Legacy system modernization Specialized industrial control Compatibility & Integration ISA-bus interface via standard 37-pin D-type male connector. 32-bit DriverLINX device drivers provide DLL and ActiveX support for Visual Basic, C/C++, and Delphi. Bundled LabVIEW VIs and compatibility with TestPoint application development enable rapid integration. Startup utility allows board operation within minutes.

Features & description

From manufacturer datasheet

Features

- Sixteen analog outputs versus eight on DDA-08 • Per-quad jumper range (voltage or current) • Internal pacer plus external pacer input • DriverLINX and register-level programming • Family accessories shared with DDA-08

DDA Characteristics / Specifications

PARAMETER	VALUE
Model	DDA-16
Manufacturer	Keithley MetraByte
Instrument Type	ISA 16 channel 12 bit analog output board
Alias	DDA-16; DDA16; Keithley DDA-16
Host Bus	ISA
Analog Outputs	16
DAC Resolution	12 bit
Channel Groups	4 channels per jumper group
Range Unipolar 5 V	0 to 5 V
Range Unipolar 10 V	0 to 10 V
Range Bipolar 2.5 V	plus/minus 2.5 V
Range Bipolar 5 V	plus/minus 5 V
Range Bipolar 10 V	plus/minus 10 V
Current Loop Range	4 to 20 mA
Range Select	jumper per 4 channel group
Pacer Internal	supported
Pacer External	supported
Related Eight Channel	DDA-08 (same family register map)
Software	DriverLINX
Programming Supplement	DDA-08/16 register level programming user's guide
Accessory Terminal	STA-U class screw terminal panel
Form	full length class ISA analog output board
Update	analog outputs enabled as a group per family register guide
Connector	DDA-08/16 family I/O header to cable
Calibration	onboard gain/offset per family

PARAMETER	VALUE
Related Two Channel	DAC-02 (different 2 channel multiplying DAC board)

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	DDA-16
Manufacturer	Keithley MetraByte
Instrument Type	ISA 16 channel 12 bit analog output board
Alias	DDA-16; DDA16; Keithley DDA-16
Host Bus	ISA
Analog Outputs	16
DAC Resolution	12 bit
Channel Groups	4 channels per jumper group
Range Unipolar 5 V	0 to 5 V
Range Unipolar 10 V	0 to 10 V
Range Bipolar 2.5 V	plus/minus 2.5 V
Range Bipolar 5 V	plus/minus 5 V
Range Bipolar 10 V	plus/minus 10 V
Current Loop Range	4 to 20 mA
Range Select	jumper per 4 channel group
Pacer Internal	supported
Pacer External	supported
Related Eight Channel	DDA-08 (same family register map)
Software	DriverLINX
Programming Supplement	DDA-08/16 register level programming user's guide
Accessory Terminal	STA-U class screw terminal panel
Form	full length class ISA analog output board
Update	analog outputs enabled asagroup per family register guide
Connector	DDA-08/16 family I/O header to cable
Calibration	onboard gain/offset per family
Related Two Channel	DAC-02 (different 2 channel multiplying DAC board)

Notes

Identity and ranges from Keithley DDA-08/16 user's guide family description and documented DDA-16 drop-in range list (16 channels, 12 bit, 4-channel groups, 0 to 10 V / 0 to 5 V / plus/minus 2.5 / 5 / 10 V, 4 to 20 mA, internal/external pacer). Analog settling, INL, and current-drive limits belong on the original DDA-08/16 specification pages; they are not copied from third-party replacement 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

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.