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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight U2356A

Agilent Keysight U2356A USB Modular Multifunction DAQ The Agilent/Keysight U2356A is a high-density USB modular multifunction data acquisition device with 64 single-ended / 32 differential analog inputs at 16-bit resolution and 500 kSa/s maximum sampling. OEM USB Modular Products data sheets also list 2 analog outputs and 24-bit digital I/O. Automated multi-channel data acquisition, USB modular test systems, and chassis-synchronized measurements with U2781A. USB modular dual-play standalone or chassis The Agilent/Keysight U2356A is a high-density USB modular multifunction data acquisition device with 64 single-ended / 32 differential analog inputs at 16-bit resolution and 500 kSa/s maximum sampling. OEM USB Modular Products data sheets also list 2 analog outputs and 24-bit digital I/O. Automated multi-channel data acquisition, USB modular test systems, and chassis-synchronized measurements with U2781A. USB modular dual-play standalone or chassis Analog Input Resolution: 16 bits no missing codes



MODEL

**Agilent / Keysight
U2356A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

U2356A

LISTING

<https://aumictechlabs.com/products/u2356a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight U2356A is a high-density USB modular data acquisition device that operates as a standalone unit or integrates into the U2781A chassis for expanded capability up to 384 channels. Built around 16-bit analog input resolution with 64 single-ended or 32 differential channels

sampling at 500 kSa/s, the U2356A delivers simultaneous multifunction measurement across analog, digital, and counter domains. Two 12-bit analog outputs at 1 MSa/s update rate support arbitrary and predefined waveform generation. Twenty-four programmable TTL digital I/O channels enable closed-loop control of external switches, relays, and solenoids, while two general-purpose counter channels round out the measurement suite. The device communicates via High-Speed USB 2.0 with USBTMC-USB488 protocol compliance.

Technical Specifications

Analog Input Resolution: 16-bit Channels: 64 single-ended or 32 differential Sampling rate: Up to 500 kSa/s Input ranges: ± 10 V, ± 5 V (bipolar) Analog Output Channels: 2 Resolution: 12-bit Update rate: 1 MSa/s Waveform support: Predefined and arbitrary Digital I/O & Counters TTL channels: 24-bit programmable Counter channels: 2 general purpose Interface & Connectivity Primary: High-Speed USB 2.0 with USBTMC-USB488 compliance Operating system: Microsoft Windows

Key Features

Standalone or modular operation within U2781A chassis infrastructure Dual functional modes: digital multimeter (polling) and simple oscilloscope (continuous with triggering) Burst mode for simulated simultaneous acquisition BenchVue software license (BV0025B) included; supports Keysight VEE, MATLAB R2007a and later, NI LabVIEW, and Microsoft Visual Studio Legacy data logging via Agilent Measurement Manager (AMM) WEEE Directive (2002/96/EC) compliant

Typical Applications

Design validation, manufacturing test, physical measurements, and closed-loop feedback stimulus applications in research and engineering environments.

Compatibility & Integration

Scalable to 384 total channels through U2781A modular chassis integration. Supports industry-standard software development environments for custom measurement automation.

End of Life Notice: Discontinued June 1, 2024. Five-year post-discontinuation support available.

U2356A Characteristics / Specifications

PARAMETER	VALUE
Model	U2356A
Analog Input Resolution	16 bits no missing codes
Analog Input Channels	64 SE / 32 DI software selectable
Maximum Sampling Rate	500 kSa/s
Scan List Memory	up to 100 selectable channel entries
Programmable Bipolar Input Ranges	plus or minus 10 V 5 V 2.5 V 1.25 V
Programmable Unipolar Input Ranges	0 to 10 V 5 V 2.5 V 1.25 V
FIFO Buffer Size	up to 8 MSa
Analog Output Resolution	12 bits
Analog Output Channels	2
Analog Output Maximum Update Rate	1 MSa/s
Analog Output Ranges	0 to 10 V plus or minus 10 V and external reference paths
Digital I/O Bits	24 bit programmable
Counter Channels	2
Counter Max Count	2^31 minus 1 bits
Trigger Modes	pre delay post and middle trigger
Remote Interface	Hi Speed USB 2.0
Compatible Chassis	U2781A USB modular product chassis
Brand Lineage	Agilent / Keysight
Series Family	U2300A USB modular DAQ

U2356A Specifications

PARAMETER	VALUE
Agilent Keysight U2356A USB Modular Multifunction DAQ	Overview
Applications	Automated multi-channel data acquisition, USB modular test systems, and chassis-synchronized measurements with U2781A.
Key Features	64 SE / 32 DI analog inputs
Technical Specifications	Model: U2356A
Notes	From Keysight/Agilent USB Modular Products data sheet model column for U2356A.

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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Notes	
From Keysight/Agilent USB Modular Products data sheet model column for U2356A.	

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