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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight U2353A

Agilent Keysight U2353A USB Modular Multifunction DAQ The Agilent/Keysight U2353A is the 500 kSa/s basic multifunction USB DAQ with 16 SE / 8 DI 16-bit inputs and two 16-bit analog outputs. OEM electrical tables list plus or minus 10 V programmable ranges, 1 MSa/s AO update, function-generation modes, and the same USB/USBTMC modular architecture as sibling U235x models. Higher-speed multi-channel acquisition, arbitrary AO stimulus, and synchronized modular DAQ in manufacturing test. Analog Input Resolution: 16 bits no missing codes The Agilent/Keysight U2353A is the 500 kSa/s basic multifunction USB DAQ with 16 SE / 8 DI 16-bit inputs and two 16-bit analog outputs. OEM electrical tables list plus or minus 10 V programmable ranges, 1 MSa/s AO update, function-generation modes, and the same USB/USBTMC modular architecture as sibling U235x models. Higher-speed multi-channel acquisition, arbitrary AO stimulus, and synchronized modular DAQ in manufacturing test. Analog Input Resolution: 16 bits no missing codes Bipolar Input Ranges: plus or minus 10 V 5 V 2.5 V 1.25 V



MODEL

**Agilent / Keysight
U2353A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

U2353A

LISTING

<https://aumictechlabs.com/products/u2353a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight U2353A is a USB modular multifunction data acquisition device that combines analog input and output, digital I/O, and counter functionality in a compact form factor. It operates

standalone or integrates into a Keysight U2781A chassis to scale up to 384 channels, making it suitable for measurement, data logging, and waveform generation across research and industrial environments.

Technical Specifications

Analog Input 16 single-ended or 8 differential multiplexed channels 16-bit resolution at up to 500 kSa/s per channel Voltage ranges: 0–10 V, ± 10 V, 0–5 V, ± 5 V, 0–2.5 V, ± 2.5 V Accuracy: $\pm 0.04\%$ of reading + 1.5 mV (10 V range); $\pm 0.08\%$ of reading + 1.5 mV (5 V range); $\pm 0.08\%$ of reading + 1.0 mV (2.5 V range) 400 kHz bandwidth; maximum 10 μ A input current

Analog Output 2 channels, 16-bit resolution at 1 MSa/s update rate Output ranges: 0–10 V and ± 10 V 5 mA maximum per channel

Arbitrary waveform generation including sinusoidal, square, triangle, sawtooth, and noise

Digital and Counter Functions 24-bit programmable TTL I/O channels 2 general-purpose counter channels, 31-bit resolution

Memory and Connectivity 8M point onboard memory USB 2.0 (480 Mbit/s) with USBTMC-USB488 compliance 100–240 VAC mains supply

Key Features

- Standalone operation or modular chassis integration
- Plug-and-play USB connectivity with hot-swappable capability
- Self-calibration to maintain offset accuracy
- Optional U2901A or U2902A terminal blocks for simplified field connections

Compact dimensions: 120 mm $\times$ 182.4 mm $\times$ 44 mm; 565 g

Typical Applications Multichannel sensor monitoring, signal acquisition and logging, waveform synthesis, automated test systems, and laboratory research requiring flexible analog and digital I/O.

Compatibility & Integration Supported development environments: Keysight VEE, MATLAB R2007a, NI LabVIEW, Microsoft Visual Studio, Agilent Measurement Manager, and Keysight BenchVue. Windows operating systems only.

U2353A Characteristics / Specifications

PARAMETER	VALUE
Analog Input Resolution	16 bits no missing codes
Analog Input Channels	16 SE / 8 DI
Maximum Sampling Rate	500 kSa/s
Analog Output Resolution	16 bits
Analog Output Channels	2
Analog Output Update Rate	1 MSa/s
Bipolar Input Ranges	plus or minus 10 V 5 V 2.5 V 1.25 V
Unipolar Input Ranges	0 to 10 V 5 V 2.5 V 1.25 V
Small Signal Bandwidth Class	1.5 MHz minus 3 dB class
System Noise Class	1 mVrms at 23 C class
Digital I/O Bits	24 bit programmable
Counter Channels	2
FIFO Buffer Analog Input	up to 8 MSa
Module Dimension With Case WxDxH	120.00 × 182.40 × 44.00 mm
Weight With Case	565 g
Remote Interface	Hi Speed USB 2.0
Operating Temperature	0 C to 55 C
Power Requirement	plus 12 VDC 2 A max input rated
Analog Output Functions	sine square triangle sawtooth noise
Trigger Modes AI	pre delay post middle
AO Driving Capability	5 mA
AO Slew Rate Class	19 V per us class
Bandwidth	Class: 1.5 MHz minus 3 dB class

U2353A Specifications

PARAMETER	VALUE
Agilent Keysight U2353A USB Modular Multifunction DAQ	Overview
Key Features	500 kSa/s maximum sampling
Function generation waveforms	24 bit DIO and dual counters
Technical Specifications	Analog Input Resolution: 16 bits no missing codes
Notes	From Keysight U2300A Series data sheet for U2353A 500 kSa/s basic multifunction DAQ.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 C to 55 C
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Power Requirement	plus 12 VDC 2 A max input rated
Analog Output Functions	sine square triangle sawtooth noise
Trigger Modes AI	pre delay post middle
AO Driving Capability	5 mA
AO Slew Rate Class	19 V per us class Notes From Keysight U2300A Series data sheet for U2353A 500 kSa/s basic multifunction DAQ.

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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Maximum Sampling Rate	500 kSa/s
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Analog Output Channels	2
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Notes	
From Keysight U2300A Series data sheet for U2353A 500 kSa/s basic multifunction DAQ.	

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