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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight MSOX3102A

Keysight / Agilent MSOX3102A InfiniiVision Oscilloscope 1 GHz 2+16 The Keysight/Agilent MSOX3102A is an InfiniiVision 3000 X-Series oscilloscope with 1 GHz analog bandwidth, 2 analog channels, and 16 digital channels. OEM 3000 X-Series fact sheets rate MegaZoom IV class update performance with 5 GSa/s class maximum sample rate and 4 Mpts memory depth on an 8.5 inch WVGA display. Embedded mixed-signal debug, education labs, serial decode with options, and general-purpose analog measurements. MegaZoom IV ultra-responsive update class The Keysight/Agilent MSOX3102A is an InfiniiVision 3000 X-Series oscilloscope with 1 GHz analog bandwidth, 2 analog channels, and 16 digital channels. OEM 3000 X-Series fact sheets rate MegaZoom IV class update performance with 5 GSa/s class maximum sample rate and 4 Mpts memory depth on an 8.5 inch WVGA display. Embedded mixed-signal debug, education labs, serial decode with options, and general-purpose analog measurements. MegaZoom IV ultra-responsive update class Series Family: InfiniiVision 3000 X-Series



MODEL

**Agilent / Keysight
MSOX3102A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

MSOX3102A

LISTING

<https://aumictechlabs.com/products/msox3102a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight MSOX3102A is a 1 GHz mixed-signal oscilloscope combining 2 analog channels with 16 digital channels for embedded system design, signal debugging, and protocol analysis. It delivers 5 GSa/s sample rate (half-channel interleaved) or 2.5 GSa/s across all channels, with up

to 4 Mpts optional memory depth and waveform update rates exceeding 1,000,000 wfms/s. The instrument integrates oscilloscope, logic analyzer, function/arbitrary waveform generator, frequency counter, and voltmeter capabilities into a single platform.

Technical Specifications

Bandwidth: 1 GHz (-3 dB) Analog Channels: 2 Digital Channels: 16 Sample Rate: 5 GSa/s (interleaved), 2.5 GSa/s (all channels) Memory Depth: 2 Mpts standard; 4 Mpts optional (interleaved); segmented memory available Rise Time (10-90%): ≤ 450 ps Waveform Update Rate: $>1,000,000$ wfms/s Display: 8.5-inch WVGA color Vertical Sensitivity: 1 mV/div to 5 V/div Vertical Resolution: 8 bits Time Base Range: 500 ps/div to 50 s/div Time Base Accuracy: 25 ppm $\pm$ 5 ppm/year aging Maximum Input Voltage: 300 Vrms / 400 Vpk; 1.6 kVpk transient overvoltage

Key Features Edge, pulse width, pattern, rise/fall time, runt, setup & hold, video, and USB trigger types Input coupling: DC, AC, High Frequency Reject, Low Frequency Reject, Noise Reject MegaZoom IV Smart Memory for responsive deep memory acquisition Waveform math: add, subtract, multiply, FFT Segmented memory for low-duty cycle pulses and packetized signals Secure Erase function for security compliance Integrated 5-digit frequency counter and protocol analyzer Optional 20 MHz function/arbitrary waveform generator

Typical Applications Embedded system design and verification Serial protocol analysis and debugging Low-duty cycle signal capture Radar burst and packetized bus analysis Multi-channel digital and analog signal correlation

Compatibility & Integration USB host and device ports support external peripherals and PC connectivity via Scope Connect software. Probe attenuation selectable for standard configurations.

MSOX3102A Characteristics / Specifications

PARAMETER	VALUE
Model	MSOX3102A
Series Family	InfiniiVision 3000 X-Series
Instrument Type	Mixed signal oscilloscope
Analog Bandwidth	1 GHz
Analog Channels	2
Digital Channels	16
Maximum Sample Rate	5 GSa/s class
Maximum Memory Depth	4 Mpts
Waveform Update Rate	1000000 waveforms per second class
Display Size	8.5 inch WVGA
Vertical Resolution	8 bit
Memory Architecture	MegaZoom IV deep memory
Input Coupling	DC AC ground
Input Impedance Class	1 MOhm and 50 ohm paths class
Hardware Counter	Integrated frequency counter class
Segmented Memory	Available
WaveGen Path	Built-in function/arbitrary generator option path
Digital Voltmeter Path	Integrated DVM option path
Serial Trigger Analysis	Optional protocol packages
Chassis Form	Benchtop InfiniiVision
Remote Interfaces	USB standard with LAN GPIB options
Brand Lineage	Keysight / Agilent
Mso Capability	Yes
Bandwidth	1 GHz

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.

performance with 5 GSa/s class maximum sample rate and 4 Mpts memory depth on an 8.5 inch WVGA display.

Applications

Embedded mixed-signal debug, education labs, serial decode with options, and general-purpose analog measurements.

Key Features

MegaZoom IV ultra-responsive update class

Mixed signal digital channel capture

Optional WaveGen and DVM upgrade path

Serial protocol option packages

Bandwidth and MSO upgradability class

Technical Specifications

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Serial Trigger Analysis	Optional protocol packages
Chassis Form	Benchtop InfiniiVision

PARAMETER	VALUE
Remote Interfaces	USB standard with LAN GPIB options
Brand Lineage	Keysight / Agilent
Mso Capability	Yes

Notes
From Keysight/Agilent InfiniiVision 3000 X-Series fact sheet model row for MSOX3102A. Exact memory split by channel mode follows the published family table.

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.