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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight MSOX3102G

Keysight / Agilent MSOX3102G InfiniiVision Oscilloscope 1 GHz 2+16 The Keysight/Agilent MSOX3102G is an InfiniiVision 3000G X-Series oscilloscope with 1 GHz analog bandwidth, 2 analog channels, and 16 digital channels. OEM 3000G 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 capacitive class display. Embedded mixed-signal debug, education labs, serial decode with options, and general-purpose analog measurements. The Keysight/Agilent MSOX3102G is an InfiniiVision 3000G X-Series oscilloscope with 1 GHz analog bandwidth, 2 analog channels, and 16 digital channels. OEM 3000G 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 capacitive class 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 3000G X-Series



MODEL

**Agilent / Keysight
MSOX3102G**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

MSOX3102G

LISTING

<https://aumictechlabs.com/products/msox3102g-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight MSOX3102G is a 1 GHz mixed-signal oscilloscope delivering 2 analog channels, 16 digital channels, and 5 GSa/s per-channel sampling. This 7-in-1 instrument combines oscilloscope, logic analyzer, protocol analyzer, Bode plot frequency response analyzer, 20 MHz

arbitrary waveform generator, 3-digit voltmeter, and 8-digit counter/totalizer in a compact 15 × 8 × 5.6 inch form factor weighing 9.3 lbs. Acquisition performance reaches 1,000,000 waveforms per second with 8-bit vertical resolution and up to 4 Mpts memory depth. The 8.5-inch capacitive touchscreen provides intuitive control alongside traditional front-panel buttons and knobs. Zone Touch triggering, edge triggering, pattern triggering, and protocol-based triggering isolate complex signal anomalies. Standard features include mask and measurement limit testing plus waveform and measurement histograms. Protocol support spans I2C, SPI, UART, I2S, and USB PD trigger and decode. Connectivity includes LAN, VGA, USB host, and USB device ports. Included accessories are one N2843A 500 MHz passive probe (10:1 attenuation) per analog channel and the N2756A 16-channel MSO cable. The D3000GENB embedded software package and PathWave BenchVue Oscilloscope Software (BV00) complete the measurement environment.

Technical Specifications
Analog Bandwidth: 1 GHz
Analog Channels: 2
Digital Channels: 16
Sample Rate: 5 GSa/s per channel
Memory Depth: Up to 4 Mpts
Waveform Update Rate: 1,000,000 waveforms/sec
Vertical Resolution: 8 bits
Arbitrary Waveform Generator: 20 MHz

Key Features
7-in-1 integrated instrument: oscilloscope, logic analyzer, protocol analyzer, frequency response analyzer, waveform generator, voltmeter, and counter/totalizer
Zone Touch triggering for efficient glitch capture
Mask and measurement limit testing
Waveform and measurement histograms
Protocol trigger and decode: I2C, SPI, UART, I2S, USB PD
8.5-inch capacitive touchscreen display
Small form factor: 9.3 lbs

Typical Applications
Embedded systems debugging and signal validation
Mixed-signal design verification
Protocol analysis and compliance testing
Frequency response characterization

Compatibility & Integration
Connectivity: LAN, VGA, USB host, USB device
Included probes: N2843A (500 MHz, 10:1)
Digital cable: N2756A 16-channel MSO
Software: D3000GENB embedded package; PathWave BenchVue Oscilloscope (BV00)

MSOX3102G Characteristics / Specifications

PARAMETER	VALUE
Model	MSOX3102G
Series Family	InfiniiVision 3000G 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 capacitive class
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 capacitive class 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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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

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

Notes
From Keysight/Agilent InfiniiVision 3000G X-Series fact sheet model row for MSOX3102G. 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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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.