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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight MSOX3102T

Keysight / Agilent MSOX3102T Mixed Signal Oscilloscope 1 GHz 2+16 The Keysight/Agilent InfiniiVision MSOX3102T is a 3000T X-Series oscilloscope with 1 GHz bandwidth and 2 analog channels plus 16 digital channels. OEM 3000T data sheets list 5 GSa/s half-channel and 2.5 GSa/s all-channel sample rate, 4 Mpts standard memory, greater than 1,000,000 waveforms/s update rate, and an 8.5-inch capacitive touch display with InfiniiScan Zone touch trigger. Mixed-signal embedded debug, touch-zone triggered anomaly capture, optional serial protocol decode, and general-purpose analog measurements on the 3000T X-Series platform. The Keysight/Agilent InfiniiVision MSOX3102T is a 3000T X-Series oscilloscope with 1 GHz bandwidth and 2 analog channels plus 16 digital channels. OEM 3000T data sheets list 5 GSa/s half-channel and 2.5 GSa/s all-channel sample rate, 4 Mpts standard memory, greater than 1,000,000 waveforms/s update rate, and an 8.5-inch capacitive touch display with InfiniiScan Zone touch trigger. Mixed-signal embedded debug, touch-zone triggered anomaly capture, optional serial protocol decode, and general-purpose analog measurements on the 3000T X-Series platform.



MODEL

**Agilent / Keysight
MSOX3102T**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

MSOX3102T

LISTING

<https://aumictechlabs.com/products/msox3102t-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight MSOX3102T is a 1 GHz mixed-signal oscilloscope delivering real-time visibility into 2 analog channels and 16 digital channels simultaneously. Built for signal integrity analysis, debugging, and protocol validation, this instrument captures transient events with an waveform update rate exceeding 1,000,000 waveforms/sec and a 4 Mpts memory depth. The 8.5-inch capacitive touch screen with gesture support streamlines navigation, while Zone Touch triggering enables intuitive signal isolation by drawing directly on the display.

Technical Specifications
Bandwidth: 1 GHz Analog Channels: 2 Digital Channels: 16 (D0–D15) Sampling Rate: Up to 5 GSa/s per channel (half-channel mode) Memory Depth: 4 Mpts standard with segmented memory Waveform Update Rate: >1,000,000 waveforms/sec Vertical Resolution: 8 bits (12 bits with averaging) Input Impedance: $1\text{ M}\Omega \pm 1\%$ ($\sim 14\text{ pF}$) or $50\ \Omega \pm 1.5\%$ Input Sensitivity Range: 1 mV/div to 5 V/div ($1\text{ M}\Omega$); 1 mV/div to 1 V/div ($50\ \Omega$) Maximum Input Voltage: 135 Vrms; 190 Vpk (300 Vrms with 10:1 passive probe) Hardware Bandwidth Limit: $\sim 20\text{ MHz}$ (selectable) Input Coupling: AC, DC Channel Isolation: >100:1 (DC to max bandwidth, matched V/div and coupling) Voltage Offset Range: $\pm 2\text{ V}$ (1–200 mV/div); $\pm 50\text{ V}$ (>200 mV/div to 5 V/div) Display: 8.5-inch capacitive touch with gesture support

Key Features Zone Touch triggering for signal capture by drawn zone boundaries MegaZoom IV technology for high-detail analysis of long, complex waveforms Edge, pulse width, video, and advanced serial triggering modes 8-bit vertical resolution; 12-bit capability with real-time averaging Selectable input impedance and AC/DC coupling per channel

Integrated Instruments Oscilloscope Logic Analyzer / Mixed Signal Oscilloscope Protocol Analyzer (supports I2C, SPI, RS232/422/485/UART, CAN, CAN FD, LIN, SENT, CXPI, FlexRay, MIL-STD 1553, ARINC 429, USB PD, I2S) 3-digit Voltmeter 8-digit Counter/Totalizer 20 MHz Arbitrary/Function Waveform Generator (optional, DSOX3WAVEGEN)

MSOX3102T Characteristics / Specifications

PARAMETER	VALUE
Model	MSOX3102T
Series Family	InfiniiVision 3000T X-Series
Instrument Type	Mixed signal oscilloscope
Bandwidth	1 GHz
Calculated Rise Time 10 To	less than or equal to 450 ps
Analog Channels	2
Digital Channels	16
Maximum Sample Rate Half Channel	5 GSa/s
Maximum Sample Rate All Channels	2.5 GSa/s
Maximum Memory Depth Standard	4 Mpts
Maximum Memory Depth All Channels Class	2 Mpts class sharing
Display	8.5 inch capacitive touch gesture-enabled
Waveform Update Rate	greater than 1,000,000 waveforms per second
Time Base Range	500 ps/div to 50 s/div
Time Base Accuracy	+/-1.6 ppm plus aging factor
Digital Min Detectable Pulse Width	5 ns
Digital Channel To Channel Skew Typical	2 ns
Digital Channel To Channel Skew Maximum	3 ns
Segmented Memory Maximum Segments	1000
Segmented Memory Rearm Time	1 us minimum
Connectivity Standard	USB 2.0 host and device
Interfaces Optional	LAN video GPIB class modules
Vertical Resolution	8 bits; up to 12 bits high-resolution mode class
Chassis Form	benchtop oscilloscope

PARAMETER	VALUE
Rise Time	10 To 90: less than or equal to 450 ps

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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Model	MSOX3102T
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Notes

From Keysight InfiniiVision 3000T X-Series oscilloscope data sheet model columns for MSOX3102T. Installed bandwidth/MSO/WaveGen licenses determine final capability.

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>

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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.