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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight MSOX3054T

WaveGen Option: optional 20 MHz function/AWG (DSOX3WAVEGEN) Optional Interfaces: LAN/VGA (DSOXLAN) and GPIB (DSOXGPIB) Dimensions WxHxD: 381 mm x 204 mm x 142 mm

Numeric rows from Keysight InfiniiVision 3000T X-Series oscilloscope data sheet model columns for MSOX3054T. Optional Interfaces: LAN/VGA (DSOXLAN) and GPIB (DSOXGPIB) Dimensions WxHxD: 381 mm x 204 mm x 142 mm Numeric rows from Keysight InfiniiVision 3000T X-Series oscilloscope data sheet model columns for MSOX3054T.



MODEL

**Agilent / Keysight
MSOX3054T**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

MSOX3054T

LISTING

<https://aumictechlabs.com/products/msox3054t-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight MSOX3054T is a 500 MHz mixed-signal oscilloscope combining 4 analog channels with 16 digital channels for synchronized time-correlated measurements up to 20 channels total. The 8.5-inch capacitive touch display with 800 × 480 pixel resolution enables intuitive signal visualization and control. With a 1,000,000 waveforms/sec capture rate, the instrument reliably detects transient glitches and anomalies. The MSOX3054T delivers 5 GSa/s sampling on half channels and 2.5 GSa/s across all channels, backed by up to 4 Mpts of memory. Technical Specifications Bandwidth: 500 MHz Analog Channels: 4 Digital Channels: 16 Sample Rate: 5 GSa/s (half channels), 2.5 GSa/s (all channels) Memory Depth: 4 Mpts (half channels), 2 Mpts (all channels), upgradeable to 4 Mpts Waveform Capture Rate: 1,000,000 wfms/s Display: 8.5-inch

capacitive touch TFT LCD, 800 × 480 pixels Display Formats: YT, XY, Roll Graticules: 8 vertical × 10 horizontal divisions with intensity control Key Features Zone Touch Trigger for spatial signal isolation via display annotation Edge, pulse width, pattern, OR, rise/fall time, Nth edge burst, runt, setup & hold, video, and USB trigger types Math functions: add, subtract, multiply, FFT, d/dt, integrate, square root Optional 20 MHz arbitrary waveform generator with AM, FM, FSK modulation; outputs sine, square, ramp, pulse, DC, Sinc(x), exponential rise/fall, cardiac, Gaussian pulse, and noise waveforms Optional 3-digit voltmeter Optional mask testing Hardware-based serial decoding and triggering: I2C, SPI, RS232/422/485/UART, CAN, CAN FD, LIN, SENT, CXPI, FlexRay, MIL-STD 1553, ARINC 429, USB PD, I2S Compatibility & Integration Supplied with one N2843A 500 MHz 10:1 passive probe per channel and one N2756A 16-channel MSO logic probe Optional LAN/VGA and GPIB modules USB connectivity for mouse and keyboard support Data export to Excel, Word, and MATLAB

MSOX3054T Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Mixed Signal Oscilloscope
Series Family	InfiniiVision 3000T X-Series
Model	MSOX3054T
Analog Bandwidth	500 MHz (minus 3 dB)
Calculated Rise Time 10 to	700 ps or less
Analog Channels	4
Digital Channels	16
Maximum Sample Rate Half Channel	5 GSa/s
Maximum Sample Rate All Channels	2.5 GSa/s
Maximum Memory Depth Half Channel	4 Mpts
Maximum Memory Depth All Channels	2 Mpts
Digital Channel Sample Rate	1.25 GSa/s all pods
Waveform Update Rate	greater than 1,000,000 waveforms per second
Display	8.5 inch capacitive touch gesture enabled
Vertical Resolution	8 bits (12 bits with averaging)
Input Impedance	1 MOhm plus or minus 1 percent (14 pF); 50 ohm plus or minus 1.5 percent
Input Sensitivity Range	1 mV/div to 5 V/div (1 MOhm and 50 ohm)
Hardware Bandwidth Limit	approximately 20 MHz selectable
DC Vertical Gain Accuracy	plus or minus 2.0 percent full scale (warranted after 30 min warm up)
DC Vertical Offset Accuracy	plus or minus 0.1 div plus or minus 2 mV plus or minus 1 percent of offset setting
Offset Range Low	plus or minus 2 V (1 mV/div to 200 mV/div)
Offset Range High	plus or minus 50 V (greater than 200 mV/div to 5 V/div)
Maximum Input Voltage	135 Vrms; 190 Vpk
Channel To Channel Isolation	greater than 100:1 from DC to maximum specified bandwidth

PARAMETER	VALUE
Time Base Range	500 ps/div to 50 s/div
Time Base Accuracy	plus or minus 1.6 ppm plus aging (1st year plus or minus 0.5 ppm; 5 years plus or minus 1.5 ppm)
Segmented Memory Maximum Segments	1000
Segmented Memory Rearm Time	1 us minimum
Peak Detect Glitch Width	250 ps at all time base settings
Digital Min Detectable Pulse Width	5 ns
Digital Channel To Channel Skew Typical	2 ns
Digital Channel To Channel Skew Maximum	3 ns
Digital Input Impedance	100 kOhm plus or minus 2 percent at probe tip
Integrated DVM	standard 3 digit voltmeter
Hardware Counter	built in frequency counter / 8 digit class with totalizer
WaveGen Option	optional 20 MHz function/AWG (DSOX3WAVEGEN)
Connectivity Standard	USB 2.0
Dimensions WxHxD	381 mm x 204 mm x 142 mm
Weight Net	4.0 kg (9.0 lb)
Form Factor	benchtop oscilloscope
Bandwidth	500 MHz (minus 3 dB)
Rise Time	10 to 90: 700 ps or less

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
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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.