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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight MSOX4104A

Agilent Keysight MSOX4104A Mixed Signal Oscilloscope 1 GHz 4+16 ch The Keysight InfiniiVision MSOX4104A is a 4000 X-Series oscilloscope with 1 GHz analog bandwidth and 4 analog channels plus 16 digital channels. OEM 4000 X-Series data sheet 5991-1103 lists 5 GSa/s half channel / 2.5 GSa/s all channel sample rate, 4 Mpts half / 2 Mpts all memory, all channel real time bandwidth 1 GHz, and a 12.1 inch capacitive touch display. Embedded mixed signal debug, serial protocol analysis, and touch zone triggered design validation on the 4000 X-Series platform. The Keysight InfiniiVision MSOX4104A is a 4000 X-Series oscilloscope with 1 GHz analog bandwidth and 4 analog channels plus 16 digital channels. OEM 4000 X-Series data sheet 5991-1103 lists 5 GSa/s half channel / 2.5 GSa/s all channel sample rate, 4 Mpts half / 2 Mpts all memory, all channel real time bandwidth 1 GHz, and a 12.1 inch capacitive touch display. Embedded mixed signal debug, serial protocol analysis, and touch zone triggered design validation on the 4000 X-Series platform. Greater than 1 million waveforms per second update rate

 Agilent/Keysight MSOX4104A

MODEL

**Agilent / Keysight
MSOX4104A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

MSOX4104A

LISTING

<https://aumictechlabs.com/products/msox4104a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight MSOX4104A is a 1 GHz mixed-signal oscilloscope combining four analog channels with 16 integrated digital channels for embedded systems debugging and signal analysis. This

benchtop instrument delivers 5 GSa/s maximum sample rate, 4 Mpts record length, and 1,000,000 waveforms/sec update rate - enabling real-time capture of complex signal behavior across analog and digital domains simultaneously.

Technical Specifications Acquisition & Measurement

Bandwidth: 1 GHz Analog Channels: 4; Digital Channels: 16 Sample Rate: 5 GSa/s (half-channel interleaved) Record Length: 4 Mpts (MegaZoom IV smart memory) Waveform Update Rate: 1,000,000 wfms/sec Calculated Rise Time: ≤ 450 ps Vertical Resolution: 8 bit Minimum Vertical Sensitivity: 1 mV/div Input Impedance: 1 M Ω (analog), 100 k Ω (digital) Input Capacitance: 8 pF Triggering Internal Trigger Sensitivity: Greater of 1 div or 5 mV (< 10 mV/div); 0.6 div (≥ 10 mV/div) External Trigger: ± 1.6 V and ± 8 V ranges (DC to 200 MHz) Trigger Level Range: ± 6 div from center; external ± 8 V or ± 1.6 V Trigger Holdoff: 40 ns to 10.00 s Physical & Environmental Display: 12.1-inch capacitive color touch screen, SVGA, 256 intensity levels Dimensions: 454 $\times$ 275 $\times$ 156 mm; Weight: 6.3 kg Power: 100–240 V, 50/60 Hz $\pm 10\%$ auto-ranging; maximum 120 W Operating Temperature: 0 to +50 $^{\circ}\text{C}$ Storage Temperature: -30 to +70 $^{\circ}\text{C}$ Operating Humidity: 50% to 95% RH at 40 $^{\circ}\text{C}$ for 5 days Safety Category: CAT I 300 V

Key Features

MegaZoom IV smart memory and segmented memory standard Zone touch triggering capability 12.1-inch capacitive touchscreen interface

Interfaces & Integration

USB and LAN connectivity. Protocol decode support includes CAN, IIC, LIN, RS232, SPI, and UART.

Warranty & Support

3-year manufacturer warranty; certificate of calibration included with 2-year calibration interval.

MSOX4104A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Mixed Signal Oscilloscope
Series Family	InfiniiVision 4000 X-Series
Model	MSOX4104A
Analog Bandwidth	1 GHz (minus 3 dB)
All Channel Real Time Bandwidth	1 GHz
Calculated Rise Time 10 to	450 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
Equivalent Sample Rate	128 GSa/s
Maximum Memory Depth Half Channel	4 Mpts
Maximum Memory Depth All Channels	2 Mpts
Digital Channel Sample Rate	1.25 GSa/s
Waveform Update Rate	greater than 1 million waveforms per second
Display	12.1 inch high definition capacitive touch
Vertical Resolution	8 bits (12 bits with averaging)
Input Impedance	1 MOhm plus or minus 1 percent (16 pF); 50 ohm plus or minus 1.5 percent
Input Sensitivity Range	1 mV/div to 5 V/div (1 MOhm); 1 mV/div to 1 V/div (50 ohm) for 1 and 1.5 GHz models
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	plus or minus 5 V (less than 10 mV/div); plus or minus 20 V (10 to 200 mV/div); plus or minus 75 V (greater than 200 mV/div)

PARAMETER	VALUE
Maximum Input Voltage 1 MOhm	135 Vrms
Maximum Input Voltage 50 Ohm	5 Vrms or less
Channel To Channel Isolation	40 dB or greater from DC to maximum specified bandwidth (200 MHz to 1 GHz models)
Time Base Range	500 ps/div to 50 s/div
Time Base Accuracy	plus or minus 10 ppm (warranted)
Peak Detect Glitch Width	200 ps at all time base settings
Digital Min Detectable Pulse Width	2 ns
Digital Channel To Channel Skew Typical	2 ns
Digital Channel To Channel Skew Maximum	3 ns
WaveGen Option	optional dual channel 20 MHz function/AWG (DSOX4WAVEGEN2)
Connectivity Standard	USB 2.0 host x3 device x1, LAN, VGA out
Dimensions WxHxD	454 mm x 275 mm x 156 mm
Weight Net	6.3 kg (13.9 lb)
Weight Shipping	11.4 kg (25 lb)
Form Factor	benchtop oscilloscope
Bandwidth	1 GHz (minus 3 dB)
Rise Time	10 to 90: 450 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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Hardware Bandwidth Limit	approximately 20 MHz selectable
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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	plus or minus 5 V (less than 10 mV/div); plus or minus 20 V (10 to 200 mV/div); plus or minus 75 V (greater than 200 mV/div)

PARAMETER	VALUE
Maximum Input Voltage 1 MOhm	135 Vrms
Maximum Input Voltage 50 Ohm	5 Vrms or less
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Digital Channel To Channel Skew Maximum	3 ns
WaveGen Option	optional dual channel 20 MHz function/AWG (DSOX4WAVEGEN2)
Connectivity Standard	USB 2.0 host x3 device x1, LAN, VGA out

Optional Interfaces: GPIB option

Specifications

PARAMETER	VALUE
Dimensions WxHxD	454 mm x 275 mm x 156 mm
Weight Net	6.3 kg (13.9 lb)
Weight Shipping	11.4 kg (25 lb)
Form Factor	benchtop oscilloscope

Notes

Numeric rows from Keysight InfiniiVision 4000 X-Series oscilloscope data sheet 5991-1103 model columns for MSOX4104A. 1.5 GHz real time bandwidth is half channel or full channel equivalent time on 4154 models.

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.