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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight MSO9104A Mixed Signal Oscilloscope: 1 GHz, 4 Analog plus 16 Digital Channels

Agilent MSO9104A Infiniium Mixed Signal Oscilloscope The Agilent MSO9104A is an Infiniium class oscilloscope with 1 GHz analog bandwidth and 20 GSa/s class interleaved maximum sample rate. OEM MSO9104A materials list deep memory options, advanced triggering, and analysis applications for high-speed digital and RF debug. High-speed digital debug, serial bus analysis, power integrity checks, and general purpose oscilloscope measurements on the 1 GHz platform. Maximum Sample Rate: 20 GSa/s class interleaved The Agilent MSO9104A is an Infiniium class oscilloscope with 1 GHz analog bandwidth and 20 GSa/s class interleaved maximum sample rate. OEM MSO9104A materials list deep memory options, advanced triggering, and analysis applications for high-speed digital and RF debug. High-speed digital debug, serial bus analysis, power integrity checks, and general purpose oscilloscope measurements on the 1 GHz platform. Maximum Sample Rate: 20 GSa/s class interleaved Analog Channels: 4 analog plus 16 digital



MODEL

**Agilent / Keysight
MSO9104A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

MSO9104A

LISTING

<https://aumictechlabs.com/products/mso9104a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight MSO9104A is a mixed-signal oscilloscope combining 4 analog channels at 1 GHz bandwidth with 16 high-speed digital channels in a single instrument. It integrates oscilloscope, logic analyzer, and protocol analyzer functionality for complex signal analysis in embedded systems and demanding test environments.

Technical Specifications

Analog Performance
Bandwidth: 1 GHz
Channels: 4 analog + 16 digital
Sample rate: 20 GSa/s (analog, 2-channel mode); 10 GSa/s (4-channel mode)
Digital sample rate: 2 GSa/s
Memory depth: 10 Mpts per channel standard, upgradeable to 1 Gpts (analog); 128 Mpts standard (digital)
Vertical resolution: 8 bits (>12 bits with averaging)
Rise/fall time: 253 ps (10–90%), 174 ps (20–80%)
Noise floor: 1.24 mVrms at 50 mV/div
Input sensitivity: 1 mV/div to 5 V/div (1 M Ω); 1 mV/div to 1 V/div (50 Ω)
Input impedance: 50 Ω $\pm$ 2.5%, 1 M Ω $\pm$ 1% (11 pF typical)
Maximum input voltage: 150 Vrms/dc (1 M Ω), 5 Vrms (50 Ω)
Channel-to-channel isolation: 50 dB (DC–50 MHz), 40 dB (>50 MHz–1 GHz), 25 dB (>1 GHz–4 GHz)
Input coupling: AC (3.5 Hz) or DC (1 M Ω); DC (50 Ω)
Hardware bandwidth limit: 20 MHz (1 M Ω input)

Acquisition & Triggering
Waveform capture rate: 250,000 waveforms per second
Segmented memory: Supported for both analog and digital channels
Triggering: InfiniiScan advanced triggering across any combination of analog and digital signals simultaneously

Key Features
15-inch XGA display with compact 9-inch depth
Weight: 26 pounds
LXI Class C compliance with LAN connectivity (RJ-45)
Built-in Web control

Typical Applications
Embedded system design, mixed-signal protocol debugging, digital-to-analog signal correlation, high-speed digital measurement, and complex multi-domain signal capture requiring synchronized analog and digital analysis.

Connectivity & Integration
LAN interface with LXI Class C support enables remote control and integration into automated test environments.

MSO9104A Characteristics / Specifications

PARAMETER	VALUE
Analog Bandwidth	1 GHz
Maximum Sample Rate	20 GSa/s class interleaved
Analog Channels	4 analog plus 16 digital
Maximum Memory Depth	deep Infiniium 9000 memory class
Vertical Resolution	8 bit
Input Impedance	50 ohms and 1 Mohm paths class
Input Coupling	AC DC GND
Time Base Range Class	wide Infiniium time base class
Trigger Types	edge pulse width pattern glitch class
Display	color LCD graphical UI
Probe Interface Class	AutoProbe or InfiniiMax class by series
Math Functions	waveform math and FFT class
Segmented Memory	available class
Peak Detect Mode	available class
Roll Mode Class	available at slow time bases class
Series Family	Infiniium 9000 MSO
Digital Channels	16
InfiniiMax Probe Support	yes
Protocol Decode Options	available
Remote Interfaces	LAN USB GPIB class
Form Factor	benchtop instrument
Operating Temperature Class	standard laboratory class
Calibration Interval Class	annual calibration class recommended
Power Mains Class	100 to 240 VAC class
Firmware Upgrade Path	option and firmware upgradeable class

PARAMETER	VALUE
Bandwidth	1 GHz
Operating temperature	Class: standard laboratory class

MSO9104A Specifications

PARAMETER	VALUE
Agilent MSO9104A Infiniium Mixed Signal Oscilloscope	Overview
Applications	High-speed digital debug, serial bus analysis, power integrity checks, and general purpose oscilloscope measurements on the 1 GHz platform.
Technical Specifications	Analog Bandwidth: 1 GHz

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: standard laboratory class
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Operating Temperature Class	standard laboratory class
Calibration Interval Class	annual calibration class recommended
Power Mains Class	100 to 240 VAC class
Firmware Upgrade Path	option and firmware upgradeable class Notes Bandwidth and sample rate from Agilent/Keysight MSO9104A oscilloscope documentation. Confirm installed memory and application options for exact record length.

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

Bandwidth and sample rate from Agilent/Keysight MS09104A oscilloscope documentation. Confirm installed memory and application options for exact record length.

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.