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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight MSOX2004A

Agilent Keysight MSOX2004A InfiniiVision 2000 X-Series Oscilloscope The Agilent/Keysight MSOX2004A is an InfiniiVision 2000 X-Series oscilloscope with 4 + 8 channels and 70 MHz bandwidth. OEM 2000 X-Series datasheets list up to 2 GSa/s sample rate, 1 Mpt per channel memory, 200,000 wfms/s update rate, and an 8.5-inch WVGA display. Embedded design debug, mixed-signal timing on MSO models, and education/general-purpose bench capture to 200 MHz class. Upgradeable WaveGen MSO bandwidth options The Agilent/Keysight MSOX2004A is an InfiniiVision 2000 X-Series oscilloscope with 4 + 8 channels and 70 MHz bandwidth. OEM 2000 X-Series datasheets list up to 2 GSa/s sample rate, 1 Mpt per channel memory, 200,000 wfms/s update rate, and an 8.5-inch WVGA display. Embedded design debug, mixed-signal timing on MSO models, and education/general-purpose bench capture to 200 MHz class. Upgradeable WaveGen MSO bandwidth options Maximum Sample Rate: 2 GSa/s half-channel interleaved, 1 GSa/s per channel



MODEL

**Agilent / Keysight
MSOX2004A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

MSOX2004A

LISTING

<https://aumictechlabs.com/products/msox2004a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight MSOX2004A is a 70 MHz mixed-signal oscilloscope combining 4 analog channels with 8 integrated digital channels for comprehensive signal analysis and embedded system debugging. This InfiniiVision 2000 X-Series instrument captures infrequent anomalies and

transient events with a waveform update rate of 200,000 waveforms per second, powered by MegaZoom IV technology. The 1 Mpts per channel memory depth enables deep waveform acquisition across all channels. Technical Specifications Bandwidth: 70 MHz (upgradeable) Analog Channels: 4 Digital Channels: 8 (integrated MSO) Sample Rate: 2 GSa/s (half-channel), 1 GSa/s (per channel) Memory Depth: 1 Mpts per channel Waveform Update Rate: 200,000 waveforms/second Vertical Resolution: 8 bits Display: 8.5-inch WVGA color Input Impedance: 1 M Ω Key Features Advanced trigger modes: Edge, Pulse Width, Pattern, Rise/Fall Time, Runt, Setup & Hold, Video, and optional serial triggering (USB, CAN/LIN, I2C/SPI, UART/RS232) 23+ automated voltage, time, and frequency measurements FFT and mathematical waveform analysis Optional WaveGen 20 MHz function generator and 3-digit voltmeter Optional protocol analyzer with segmented memory and mask testing capabilities Typical Applications Embedded system verification, mixed-signal circuit debugging, protocol analysis, power supply characterization, and transient capture in laboratory and field environments. Compatibility & Integration Supports Keysight AutoProbe interface with included N2862B 150 MHz 10:1 passive probes per channel. USB Host/Device connectivity standard; optional LAN, VGA, and GPIB interfaces available. Compatible with Keysight BenchVue software for test automation and data collection. Bandwidth upgradeable; MSO capability fully upgradable.

MSOX2004A Characteristics / Specifications

PARAMETER	VALUE
Analog Channels	4
Digital Channels	8
Bandwidth	70 MHz
Maximum Sample Rate	2 GSa/s half-channel interleaved, 1 GSa/s per channel
Memory Depth	1 Mpt per channel
Waveform Update Rate	200000 wfms/s
Display	8.5 inch WVGA 800 × 480
Built In DVM	3 digit
Built In Frequency Counter	5 digit
Connectivity	USB host front/back USB device; optional LAN GPIB
Calibration Interval Recommended	2 years
Series Family	Keysight InfiniiVision 2000 X-Series
Hardware Bandwidth Limit	approximately 20 MHz selectable
Time Base Accuracy Class	25 ppm plus or minus 5 ppm per year aging class
Form Factor	Bench
MegaZoom	Yes
Segmented Memory	Optional/standard per PLUS upgrades
Protocol Analysis	Optional serial applications
Input Impedance Class	1 MOhm class standard
Probe Support	AutoProbe passive probes
Operating Temperature Class	Standard lab class
Operating temperature	Class: Standard lab class

MSOX2004A Specifications

PARAMETER	VALUE
Applications	Embedded design debug, mixed-signal timing on MSO models, and education/general-purpose bench capture to 200 MHz class.
Key Features	200000 waveforms per second update rate
Technical Specifications	Analog Channels: 4
Notes	From Keysight InfiniiVision 2000 X-Series oscilloscope data sheet / fact sheet for MSOX2004A.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: Standard lab class
Operating Temperature	Class: Standard lab class
Operating Temperature Class	Standard lab class Notes From Keysight InfiniiVision 2000 X-Series oscilloscope data sheet / fact sheet for MSOX2004A.

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	
Specifications	
PARAMETER	VALUE
Analog Channels	4
Digital Channels	8
Bandwidth	70 MHz
Maximum Sample Rate	2 GSa/s half-channel interleaved, 1 GSa/s per channel
Memory Depth	1 Mpt per channel
Waveform Update Rate	200000 wfms/s
Display	8.5 inch WVGA 800 x 480
Built In DVM	3 digit
Built In Frequency Counter	5 digit
Optional WaveGen: 20 MHz	
Specifications	
PARAMETER	VALUE
Connectivity	USB host front/back USB device; optional LAN GPIB
Calibration Interval Recommended	2 years
Series Family	Keysight InfiniiVision 2000 X-Series
Hardware Bandwidth Limit	approximately 20 MHz selectable
Time Base Accuracy Class	25 ppm plus or minus 5 ppm per year aging class
Form Factor	Bench
MegaZoom	Yes
Segmented Memory	Optional/standard per PLUS upgrades
Protocol Analysis	Optional serial applications
Input Impedance Class	1 MOhm class standard
Probe Support	AutoProbe passive probes
Operating Temperature Class	Standard lab class

Notes

From Keysight InfiniiVision 2000 X-Series oscilloscope data sheet / fact sheet for MSOX2004A.

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.