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August 15, 2026

AGILENT / KEYSIGHT

# Agilent/Keysight MXR204A

Keysight Infiniium MXR204A Real Time Oscilloscope 2 GHz 4 Channel The Keysight Infiniium MXR204A is an MXR-Series real-time oscilloscope with 2 GHz analog bandwidth (-3 dB) on the 50 ohm path and 4 analog channels. The OEM Infiniium MXR-Series data sheet lists 16 GSa/s sample rate on every channel, 200 Mpts standard memory per channel, 10 bit vertical resolution (up to 16 bits in high-resolution mode), timebase accuracy of 8 ppb, intrinsic jitter as low as 118 fs, and a 15.6 inch full HD touch display. The Keysight Infiniium MXR204A is an MXR-Series real-time oscilloscope with 2 GHz analog bandwidth (-3 dB) on the 50 ohm path and 4 analog channels. The OEM Infiniium MXR-Series data sheet lists 16 GSa/s sample rate on every channel, 200 Mpts standard memory per channel, 10 bit vertical resolution (up to 16 bits in high-resolution mode), timebase accuracy of 8 ppb, intrinsic jitter as low as 118 fs, and a 15.6 inch full HD touch display. High-speed digital debug, power integrity and rail analysis, protocol decode, compliance testing, and multi-channel RF analysis with optional RTSA/DDC on the Infiniium MXR platform.



MODEL

**Agilent / Keysight  
MXR204A**

CALIBRATION

**Available on  
request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**MXR204A**

LISTING

<https://aumictechlabs.com/products/mxr204a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

## This unit

The Agilent/Keysight MXR204A is a 2 GHz, 4-channel real-time oscilloscope built on ASIC technology from the Infiniium UXR-Series. It delivers 16 GSa/s sample rate across all channels

simultaneously, with effective number of bits up to 9.0 and noise as low as 43  $\mu$ V. The instrument combines oscilloscope, spectrum analyzer, waveform generator, digital logic analyzer, and counters in a single platform.

**Technical Specifications**

- Bandwidth: 2 GHz on all 4 analog channels (upgradeable)
- Sample Rate: 16 GSa/s on all channels simultaneously
- ADC Resolution: 10 bits standard; up to 16 bits in high-resolution mode
- Memory Depth: 200 Mpts per channel standard, upgradeable to 400 Mpts or 1.6 Gpts
- ENOB: Up to 9.0
- Noise Floor: 43  $\mu$ V minimum
- Timebase Accuracy: 8 parts per billion
- Intrinsic Jitter: 118 fs minimum
- Rise/Fall Time: 215 ps (10-90%), 155 ps (20-80%)
- Waveform Update Rate: Over 200,000 waveforms per second
- Display: 15.6-inch capacitive touchscreen, 1920×1080 pixels, supports external monitor

**Key Features**

- Four analog channels, platform supports up to 8 channels
- 16 dedicated digital logic channels (MXR2MSO option)
- Integrated 50 MHz waveform generator (MXR2WAV option)
- Real-time spectrum analyzer with 2 GHz analysis bandwidth; DDC/RTSA standard at 40 MHz with 160 or 320 MHz options
- Over 50 standard measurements
- Three-stage triggering with advanced region-based and parameter-based options
- 4-digit DVM and 10-digit counters standard
- Advanced jitter and phase noise analysis
- Protocol analysis options available
- Keysight I/O libraries suite included

**Typical Applications**

Signal integrity validation, digital interface characterization, frequency domain analysis, protocol debugging, and multi-domain test automation.

**Compatibility & Integration**

The MXR204A supports modular expansion through optional modules for additional digital channels, arbitrary waveform generation, and extended frequency analysis capabilities.

# MXR204A Characteristics / Specifications

| PARAMETER                                   | VALUE                                                     |
|---------------------------------------------|-----------------------------------------------------------|
| Model                                       | MXR204A                                                   |
| Instrument Family                           | Infiniium MXR-Series                                      |
| Analog Bandwidth Fifty Ohm                  | 2 GHz                                                     |
| Analog Bandwidth One Megohm                 | 500 MHz                                                   |
| Analog Channels                             | 4                                                         |
| Digital Logic Channels                      | 16 optional via MXR2MSO                                   |
| Sample Rate Real Time                       | 16 GSa/s all analog channels                              |
| Sample Resolution                           | 62.5 ps                                                   |
| Vertical Resolution                         | 10 bits up to 16 bits high resolution mode                |
| Standard Memory Depth                       | 200 Mpts per channel                                      |
| Extended Memory Depth                       | 400 Mpts per channel or 1.6 Gpts combined flexible memory |
| Real Time Update Rate                       | greater than 200000 waveforms per second                  |
| Eye Diagram Plot Rate                       | greater than 750000 UI per second                         |
| Timebase Accuracy                           | 8 ppb initial plus 75 ppb per year aging                  |
| Intrinsic Jitter Four Channel Models        | 118 fs rms at 100 ns/div                                  |
| Intrinsic Jitter Eight Channel Models       | 150 fs rms at 100 ns/div                                  |
| Inter Channel Intrinsic Jitter              | 100 fs rms                                                |
| Lowest Noise One Millivolt Per Division     | as low as 43 uV (20 MHz high resolution path)             |
| Rms Noise Floor At Model Bandwidth          | 91 uV at 1 mV/div on 50 ohm inputs                        |
| Effective Number Of Bits At Model Bandwidth | 7.6 at 50 mV/div on 50 ohm inputs                         |
| Typical Rise Time Ten Ninety                | 215 ps                                                    |
| Typical Rise Time Twenty Eighty             | 155 ps                                                    |
| Input Impedance Fifty Ohm                   | 50 ohm plus or minus 3.5 percent                          |
| Input Impedance One Megohm                  | 1 Mohm plus or minus 1 percent (14 pF typical)            |
| Input Sensitivity Fifty Ohm                 | 1 mV/div to 1 V/div                                       |

| PARAMETER                                      | VALUE                                                                |
|------------------------------------------------|----------------------------------------------------------------------|
| Input Sensitivity One Megohm                   | 1 mV/div to 5 V/div                                                  |
| Max Input Voltage Fifty Ohm                    | plus or minus 5 V max                                                |
| Max Input Voltage One Megohm                   | 30 Vrms or plus or minus 40 V max                                    |
| Dc Gain Accuracy                               | plus or minus 2 percent full scale (plus or minus 1 percent typical) |
| Channel Isolation Adjacent Dc To Two Gigahertz | less than or equal to -60 dB                                         |
| Display                                        | 15.6 inch touch full HD 1920×1080 with dual screen support           |
| Waveform Generator Bandwidth                   | 50 MHz with MXR2WAV                                                  |
| Rtsa Analysis Bandwidth Standard               | 40 MHz                                                               |
| Rtsa Analysis Bandwidth Extended               | 160 MHz or 320 MHz with MXR2RTSA                                     |
| Dimensions Height                              | 327.5 mm (12.9 in)                                                   |
| Dimensions Width                               | 444.5 mm (17.5 in)                                                   |
| Dimensions Depth                               | 224.1 mm (8.85 in)                                                   |
| History Mode Depth                             | up to 1024 previous acquisitions                                     |
| Segmented Memory Acquisitions                  | up to 78953 future acquisitions                                      |
| Max Edge Trigger Frequency                     | 6 GHz on 50 ohm path                                                 |
| Digital Channel Bandwidth                      | 300 MHz with MSO                                                     |
| Digital Channel Sample Rate                    | 8 GSa/s with MSO                                                     |
| Bandwidth                                      | Fifty Ohm: 2 GHz                                                     |
| Rise Time                                      | Ten Ninety: 215 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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| PARAMETER                                   | VALUE                                                     |
| Model                                       | MXR204A                                                   |
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| Analog Channels                             | 4                                                         |
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| Sample Rate Real Time                       | 16 GSa/s all analog channels                              |
| Sample Resolution                           | 62.5 ps                                                   |
| Vertical Resolution                         | 10 bits up to 16 bits high resolution mode                |
| Standard Memory Depth                       | 200 Mpts per channel                                      |
| Extended Memory Depth                       | 400 Mpts per channel or 1.6 Gpts combined flexible memory |
| Real Time Update Rate                       | greater than 200000 waveforms per second                  |
| Eye Diagram Plot Rate                       | greater than 750000 UI per second                         |
| Timebase Accuracy                           | 8 ppb initial plus 75 ppb per year aging                  |
| Intrinsic Jitter Four Channel Models        | 118 fs rms at 100 ns/div                                  |
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| Lowest Noise One Millivolt Per Division     | as low as 43 uV (20 MHz high resolution path)             |
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| History Mode Depth                             | up to 1024 previous acquisitions                                     |
| Segmented Memory Acquisitions                  | up to 78953 future acquisitions                                      |
| Max Edge Trigger Frequency                     | 6 GHz on 50 ohm path                                                 |
| Digital Channel Bandwidth                      | 300 MHz with MS0                                                     |
| Digital Channel Sample Rate                    | 8 GSa/s with MS0                                                     |

#### Notes

Bandwidth, channel count, rise/fall times, sample rate, memory, noise, ENOB, timebase, jitter, input ranges, display size, and dimensions from the Keysight Infiniium MXR-Series data sheet performance characteristics and model number table (MXR05xA through MXR60xA rows). Model MXR204A uses the MXR family row matching 2 GHz bandwidth.

### Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto: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.