

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight MXR608A

Keysight Infiniium MXR608A Real Time Oscilloscope 6 GHz 8 Channel The Keysight Infiniium MXR608A is an MXR-Series real-time oscilloscope with 6 GHz analog bandwidth (-3 dB) on the 50 ohm path and 8 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 MXR608A is an MXR-Series real-time oscilloscope with 6 GHz analog bandwidth (-3 dB) on the 50 ohm path and 8 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
MXR608A****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****MXR608A****LISTING**<https://aumictechlabs.com/products/mxr608a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight MXR608A is an 8-channel, 6 GHz real-time oscilloscope engineered for high-fidelity signal capture and advanced analysis. Part of the Infiniium MXR-Series, this

instrument delivers 16 GSa/s sampling across all channels with hardware-accelerated eye diagram generation exceeding 750,000 UI/s at 10-bit resolution. The platform combines oscilloscope, spectrum analyzer, logic analyzer, waveform generator, and counter functions in a single integrated instrument - enabling rapid troubleshooting from symptom identification to root cause resolution.

Technical Specifications

Bandwidth: 6 GHz on all 8 analog channels (upgradeable)
Sample Rate: 16 GSa/s per channel
Memory Depth: 200 Mpts standard; upgradeable to 400 Mpts or 1.6 Gpts
Resolution: 10 bits (upgradeable to 16 bits)
Rise Time: 72 ps (10-90%), 52 ps (20-80%)
Real-time Update Rate: >200,000 waveforms/sec
Eye Diagram Rate: >750,000 UI/s at 10 bits
Noise Floor: 43 μ Vrms ENOB: Up to 9.0
Frequency Accuracy: 8 parts per billion
Input Impedance: 50 Ω
Dynamic Range: 108 dB
Display: 15.6" capacitive touchscreen with external monitor support

Key Features

8-in-1 instrument integration: oscilloscope, real-time spectrum analyzer, digitally down-converted analysis, logic analyzer (16-channel MSO option), 50 MHz waveform generator, 4-digit DVM, 10-digit counters, and 50 MHz frequency response analyzer
Flexible three-stage triggering architecture
Over 50 standard measurements AC, DC, and GND input coupling
Standard analysis bandwidth of 40 MHz (upgradeable to 160 MHz or 320 MHz with frequency extension)
Full bandwidth and channel count upgradability
One N2873A 500 MHz passive probe per channel included

Typical Applications

High-speed serial protocol analysis, real-time spectrum monitoring, complex signal characterization, and multi-domain troubleshooting requiring simultaneous time and frequency domain visibility.

Compatibility & Integration

Ships with Keysight I/O libraries suite, user guide, and programmer's guide. Includes keyboard, mouse, front panel hard cover, probe accessory pouch, BNC calibration cable, and localized power cord.

MXR608A Characteristics / Specifications

PARAMETER	VALUE
Model	MXR608A
Instrument Family	Infiniium MXR-Series
Analog Bandwidth Fifty Ohm	6 GHz
Analog Bandwidth One Megohm	500 MHz
Analog Channels	8
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	193 uV at 1 mV/div on 50 ohm inputs
Effective Number Of Bits At Model Bandwidth	6.8 at 50 mV/div on 50 ohm inputs
Typical Rise Time Ten Ninety	71.7 ps
Typical Rise Time Twenty Eighty	51.7 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: 6 GHz
Rise Time	Ten Ninety: 71.7 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	
Specifications	
PARAMETER	VALUE
Model	MXR608A
Instrument Family	Infiniium MXR-Series
Analog Bandwidth Fifty Ohm	6 GHz
Analog Bandwidth One Megohm	500 MHz
Analog Channels	8
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	193 uV at 1 mV/div on 50 ohm inputs
Effective Number Of Bits At Model Bandwidth	6.8 at 50 mV/div on 50 ohm inputs
Typical Rise Time Ten Ninety	71.7 ps
Typical Rise Time Twenty Eighty	51.7 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 1920x1080 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 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 MXR608A uses the MXR family row matching 6 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 · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 15, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.