

# The Infiniium MXR-Series Oscilloscope: See More. Do More. Save Time.

Keysight's Infiniium MXR-Series oscilloscope is a window into the intricate interactions of your complex designs. Offering illuminating views of all crucial signals, the Infiniium MXR-Series helps you go from symptom to resolution in minutes instead of hours. See more, do more, save time. And it offers 4-channel and 8-channel models.

While the Infiniium S-Series is an outstanding general-purpose oscilloscope, the newer Infiniium MXR-Series combines the best signal integrity and capabilities of our industry-first technology in the advanced high-performance UXR-Series scope with the instrument integration and speed of our InfiniiVision scopes. This makes the Infiniium MXR-Series the best scope from 500 MHz to 6 GHz in the industry.



Infiniium MXR-Series' superior signal integrity and hardware-accelerated performance help you solve problems faster

## Benefits of the Keysight MXR-Series over the S-Series Oscilloscope

The MXR-Series is faster

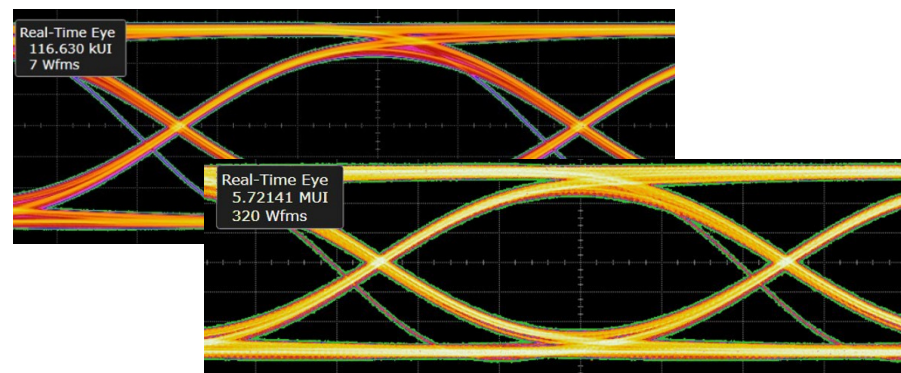
- Waveform update rate > 200x faster
- Build eye diagrams > 50x faster
- On-screen measurements > 20% faster
- Waveform averaging > 120x faster
- Spectral speed (FFTs) > 400x faster

The MXR-Series is more accurate

- ENOB is equal or higher at every frequency, period
- Up to 25% lower noise (as low as 63  $\mu$ V at 1 GHz)

The MXR-Series has much more test capability

- 8 analog channels
- **New** Fault Hunter
- 8 instruments in 1
  - Digital oscilloscope
  - Logic analyzer
  - Protocol analyzer
  - **New** digital voltmeter
  - **New** 10-digit counter
  - **New** waveform generator
  - **New** frequency response analyzer



The Infiniium MXR-Series builds eye diagrams 50 times faster than the S-Series. In the same amount of time, the MXR-Series captures 5.7 million UI, while the S-Series captures only 0.12 million UI.

Learn more at: [www.keysight.com](http://www.keysight.com)

Find us at [www.keysight.com](http://www.keysight.com)

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## Specification Comparisons: Infiniium MXR-Series vs. Infiniium S-Series and 9000A Series

Spec/criteria	Infiniium 9000 Series	Infiniium S-Series	Infiniium MXR-Series
Channel count, analog	✗ 4	✗ 4	✓ 4 or 8
Channel upgrades	✗ No	✗ No	✓ Yes
Bandwidth available	✓ 600 MHz, 1, 2.5, 4 GHz	✓ 500 MHz, 1, 2, 2.5, 4, 6, 8 GHz	✓ 500 MHz, 1, 2, 2.5, 4, 6 GHz
Max bandwidth (2 channel)	✗ 4 GHz	✓ 8 GHz	✗ 6 GHz
Max bandwidth (4 channels)	✗ 4 GHz	✗ 4 GHz	✓ 6 GHz
Max bandwidth (8 channels)	✗ -	✗ -	✓ 6 GHz
Max sampling rate (all channels)	✗ 10 GSa/s	✗ 10 GSa/s	✓ 16 GSa/s
Total scope sample rate	✗ 40 GSa/s	✗ 40 GSa/s	✓ 128 GSa/s
Vertical resolution (ADC bits)	✗ 8	✓ 10	✓ 10
Standard memory (all channels)	✗ 100 Mpts	✗ 100 Mpts	✓ 200 Mpts
Maximum memory (all channels)	✓ 500 Mpts	✓ 400 Mpts	✓ 400 Mpts
Waveform generator	✗ No	✗ No	✓ Yes
Counter	✗ No	✗ No	✓ Yes (10 digits)
Digital voltmeter	✗ No	✗ No	✓ Yes (4 digits)
Fault Hunter	✗ No	✗ No	✓ Yes
Fast capture history mode	✗ No	✗ No	✓ Yes
Waveform update rate	✗ < 1,000 wfm/s	✗ < 1,000 wfm/s	✓ > 200,000 wfm/s
Maximum edge trigger frequency	✗ 4 GHz	✗ 3 GHz	✓ 6 GHz
Eye diagram plotting speed	✗	✗ > 15,000 UI/s	✓ > 750,000 UI/s
Noise floor (100 mV/div)	✗ 2,430 µV	✗ 960 µV	✓ 681 µV
ENOB (50mV/div)	✗ 6.1 (1 GHz), 5.9 (4 GHz)	✗ 7.8 (1 GHz), 7.2 (4 GHz)	✓ 8.0 (1 GHz), 7.2 (4 GHz)
Timebase accuracy	✗ more than +1,000 ppb	✗ +12 ppb	✓ +8 ppb
Intrinsic jitter	✗ > 200 fs rms	✗ 145 fs rms	✓ 120 fs rms
Waveform averaging speed	✗ > 100 wfm/s	✗ > 100 wfm/s	✓ > 12,000 wfm/s
RTSA	✗ No	✗ No	✓ Yes
FFT speed (FFT/s)	✗ < 1,000	✗ < 1,000	✓ 400,000 (with RTSA)
Digital downconversion (DDC)	✗ No	✗ No	✓ Yes (up to 2 GHz all channels)
Screen size / resolution	✗ 15" / 1024 x 768 XGA	✗ 15" / 1024 x 768 XGA	✓ 15.6" / 1920 x 1080 (full HD)
Standard storage (removable)	✗ 256 GB SSD	✗ 256 GB SSD	✓ 500 GB SSD (1 TB SSD optional)
Power	375 W	380 W	4ch: 450 W; 8ch: 650 W
Weight	26 lbs. (11.8 kg)	26.4 lbs. (12 kg)	4ch: 30 lbs. (13.7 kg); 8ch: 32 lbs. (14.5 kg)
Dimensions	H 33 cm x W 43 cm x D 23 cm	H 33 cm x W 43 cm x D 23 cm	H 33 cm x W 44 cm x D 23 cm



### Infiniium MXR-Series key trade-in benefits



Save up to 30% on a new MXR-Series



Migrate to the latest technology — sooner



Enhance your competitive edge

### Future-proof your MXR-Series — Upgrade

- From 4 channels or 8 channels
- Bandwidth from 500 MHz to 6 GHz (license key upgrade)
- Add capture and analysis memory
- Extensive protocol decodes and compliance applications
- Full complement of probes

### MXR-Series industry firsts

- First and only scope to support > 2 GHz on 8 channels
- Upgrade from 4 or 8 channels
- Always-on update rate > 200,000 wfm/s
- RTSA – real-time spectrum analysis in an oscilloscope
- Keysight Fault Hunter analysis application
- Fully upgradeable, no exceptions

Learn more at: [www.keysight.com](http://www.keysight.com)