The Keysight Infiniium EXR-Series Oscilloscope

While the Infiniium S-Series is an outstanding general-purpose oscilloscope, the new Infiniium EXR-Series combines the best signal integrity and capabilities of our industry-first technology in our advanced high-performance UXR-Series scope with the instrument integration and speed of our InfiniiVision scopes. This makes the Infiniium EXR-Series the best scope from 500 MHz to 2.5 GHz in the industry.

The Benefits of the Keysight **EXR-Series** over the Keysight **S-Series** Oscilloscope
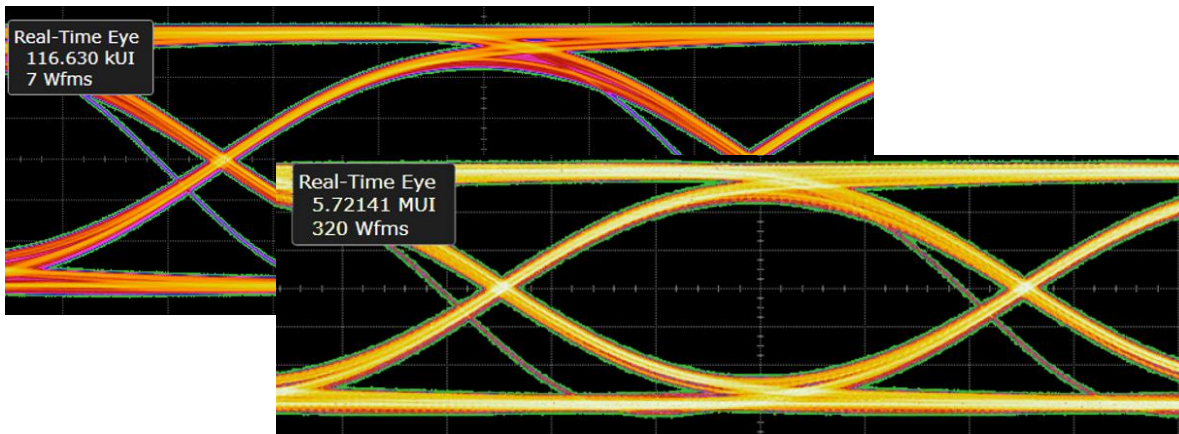
The EXR-Series is Faster
- ✓ Waveform update rate >200x faster
- ✓ Build eye-diagrams >50x faster
- ✓ On screen measurements >20% faster
- ✓ Waveform averaging >120x faster

The EXR-Series is More Accurate
- ✓ ENOB is equal or higher at every frequency, period!
- ✓ Up to 25% lower noise (as low as 63 µV at 1 GHz)

The EXR-Series has Much More Test Capability
- ✓ 8 analog channels
- ✓ New Fault Hunter
- ✓ 7 instruments in 1
  - ✓ Digital oscilloscope
  - ✓ Logic Analyzer
  - ✓ Protocol Analyzer
  - ✓ New Digital Voltmeter
  - ✓ New 10-digit counter
  - ✓ New Arbitrary Waveform Generator
  - ✓ New Frequency Response Analyzer

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

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Spec/Criteria	InfiniiVision 6000 X-Series	Infiniium S-Series	Infiniium EXR-Series
Channel Count, Analog	✗ 2 or 4	✗ 4	✓ 4 or 8
Channel Upgrades	✗ No	✗ No	✓ Yes
Bandwidths available	✓ 1, 2.5, 4, 6 GHz	✓ 500 MHz, 1, 2, 2.5, 4, 6, 8 GHz	✗ 500 MHz, 1, 2, 2.5 GHz
Max Bandwidth (2 channel)	✗ 6 GHz	✓ 8 GHz	✗ 2.5 GHz
Max Bandwidth (4 channels)	✓ 4 GHz	✓ 4 GHz	✗ 2.5 GHz
Max Bandwidth (8 channels)	✗ -	✗ -	✓ 2.5 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)	✗ 2 Mpts	✓ 100 Mpts	✓ 100 Mpts
Maximum Memory (all channels)	✗ 2 Mpts	✓ 400 Mpts	✓ 400 Mpts
Arbitrary Waveform Generator	✗ Yes (20 MHz)	✗ No	✓ Yes (50 MHz)
Counter	✗ Yes, one (10 digits)	✗ No	✓ Yes, three (10 digits)
Digital Voltmeter	✓ Yes (4 digits)	✗ No	✓ Yes (4 digits)
Fault Hunter	✗ No	✗ No	✓ Yes
Fast Capture History Mode	✗ No	✗ No	✓ Yes
Waveform Update Rate	✓ > 200,000 wfm/s	✗ < 1,000 wfm/s	✓ > 200,000 wfm/s
Eye Diagram Plotting Speed	✗ >15,000 UI/s	✗ >15,000 UI/s	✓ >750,000 UI/s
Noise Floor (100 mV/div, 1 GHz)	✗ 3,150 µV	✗ 960 µV	✓ 821 µV
ENOB (50mV/div)	✗ <7.0	✗ 7.8 (1 GHz), 7.4 (2.5 GHz)	✓ 8.0 (1 GHz), 7.5 (2.5 GHz)
Timebase Accuracy	✗ ±1,600 ppb	✗ ±12 ppb	✓ ±8 ppb
Intrinsic Jitter (w/ ext. ref)	✗ 600 fs rms	✗ 145 fs rms	✓ 120 fs rms
Waveform Averaging Speed	✗ >100 wfm/s	✗ >100 wfm/s	✓ >12,000 wfm/s
Screen Size/Resolution	✗ 12.1" / 800 x 600	✗ 15" / 1024 x 768 XGA	✓ 15.6"/ 1920 x 1080 (Full HD)
Standard Storage (removable)	✗ None	✗ 256 GB SSD	✓ 500 GB SSD (1 TB SSD optional)
Power	200 W	380 W	4ch: 450 W; 8ch: 650 W
Weight	15 lbs. (6.8 kg)	26.4 lbs. (12 kg)	4ch: 30 lbs. (13.7 kg); 8ch: 32 lbs. (14.5 kg)
Dimensions	H 29cm x W 43cm x D 15cm	H 33cm x W 43cm x D 23cm	H 33cm x W 44cm x D 23cm

Future Proof Your EXR-Series - Upgrade

✓ From 4-channels to 8-channels
✓ Bandwidth from 500 MHz to 2.5 GHz (license key upgrade)
✓ Add capture and analysis memory
✓ Extensive protocol decodes and compliance applications
✓ Full compliment of probes

✓ 2.5 GHz, 16 GSa/s and 100 Mpts on all 8 channels
✓ Upgrade from 4 to 8-channels
✓ Always on update rate > 200,000 wfm/s

EXR-Series Industry Firsts

✓ On-Screen Waveform Editor for AWG
✓ Keysight Fault Hunter analysis application
✓ Fully Upgradeable

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