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

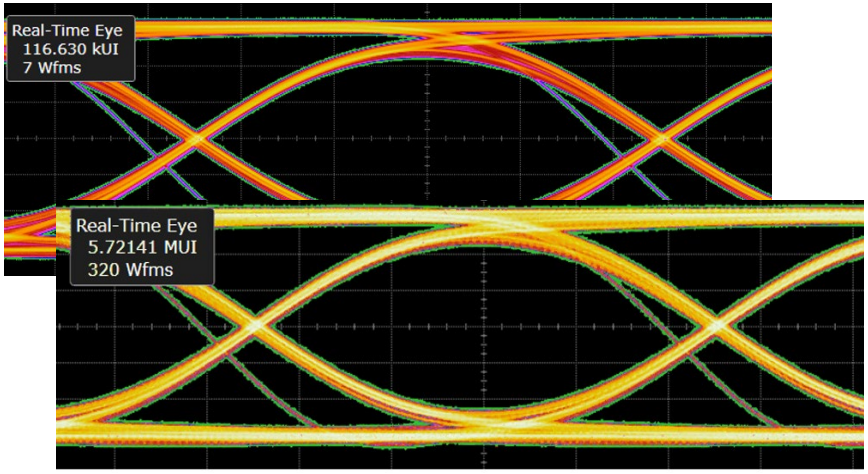
- Waveform update rate > 200x faster
- Build eye-diagrams > 50x faster
- On screen measurements > 20% faster
- Waveform averaging > 120x faster

The EXR-Series 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 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 Infiniium EXR-Series builds eye diagrams 50 times 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

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 29 cm x W 43 cm x D 15 cm		H 33 cm x W 43 cm x D 23 cm		H 33 cm x W 44 cm x D 23 cm

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 complement of probes

EXR-Series industry firsts

- Supports > 2 GHz on 8 channels and fully upgradeable
- Upgrade from 4 to 8-channels
- Always-on update rate > 200,000 wfm/s
- On-Screen Waveform Editor for AWG
- Keysight Fault Hunter analysis application

Learn more at: www.keysight.com

KEYSIGHT TECHNOLOGIES