

# MXO 4 SERIES OSCILLOSCOPE

## versus Keysight InfiniiVision HD3

The MXO 4 provides accelerated insight with the latest technologies, including 12-bit ADC with up to 18 bit of resolution, 400 Mpoints standard memory and the industry's fastest update rate of 4.5 million waveforms/s. Capture signal details that no other oscilloscope sees.



Benefit	MXO 4 features
See more signal details faster. Find signal anomalies quickly.	Unparalleled update rate of 4.5 million waveforms/s and the industry's fastest trigger rearm time of < 21 ns.
See and measure signals accurately	Measurements, math and spectrum are performed directly on waveform data for accuracy. Use HD mode to see even more details with enhanced 18-bit vertical resolution.
Capture more time	With ultra-deep 400 Mpoint standard memory and optional 800 Mpoint memory, capture long durations at higher sample rates/higher bandwidths.
Get insight quicker	Hardware-acceleration of all math operators and spectrum for faster and more accurate insight.

Parameter	MXO 4 series	Keysight InfiniiVision HD3
<b>Acquisition system</b>		
Bandwidth	200/350/500 MHz, 1 GHz, 1.5 GHz (all upgradeable to 1.5 GHz)	200/350/500 MHz, 1 GHz (all upgradeable to 1 GHz)
Maximum real-time sampling rate	5.0 Gsample/s	3.2 Gsample/s
Maximum standard memory depth	400 Mpoints; 800 Mpoints (optionally, interleaved)	20 Mpoints; 100 Mpoints
ADC/maximum resolution	12 bit/18 bit	14 bit/16 bit
Noise		
▶ 1 mV/div, 500 MHz, 50 Ω	0.54% of full scale	0.44% of full scale
▶ 1 mV/div, 500 MHz, 1 MΩ	0.53% of full scale	1.2% of full scale
Waveform update rate	4 500 000 waveforms/s	1 300 000 waveforms/s
Maximum offset (0 to 100 mV/div)	±5 V	±1.5 V
Channel-to-channel isolation	≥ 60 dB (1:1000)	(1:100)
Timebase accuracy	±0.2 ppm	±1.6 ppm
<b>Waveform math and measurements</b>		
Waveform math		
▶ Number of maths	up to 5	up to 4
▶ Equation editor available	•	–
▶ Channel speed (C1 + C2)	2.3 million operations/s at 20 ns/div	0.000003 operations/s at 20 ns/div
Measurements directly on waveform data?	•; using all samples	–; forced accuracy and update restrictions
<b>Probes and hardware options</b>		
Standard passive probes	700 MHz	500 MHz
Arbitrary function generator	2 channels, 100 MHz, 16-bit resolution, ARB length: 40 Mpoints	1 channels, 100 MHz, 14-bit resolution, ARB memory: 0.008 Mpoints
MSO	16 channels, 5 Gsample/s, 400 Mpoints per channel	16 channels, 1.6 Gsample/s, 20 Mpoints memory
<b>Mechanical data</b>		
Display	13.3" Full HD (1920 × 1080 pixel)	12.1" VGA (1080 × 800 pixel)
Maximum power	210 W	275 W
Dimensions (W × H × D)	41.4 mm × 27.9 mm × 16.2 cm	33.5 mm × 26.2 mm × 16.8 cm



For options, prices and more information, visit [www.rohde-schwarz.com/product/MXO4](http://www.rohde-schwarz.com/product/MXO4)

# Bigger, pixel-rich display, R&S®SmartGrid flexibility

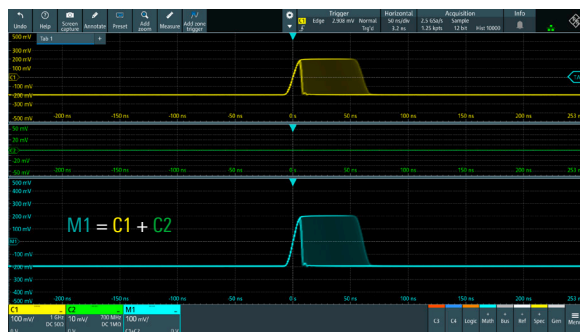
Enjoy more area, pixels and greater grid flexibility; only with MXO 4 oscilloscopes.



Display area of MXO 4 versus InfiniiVision HD3

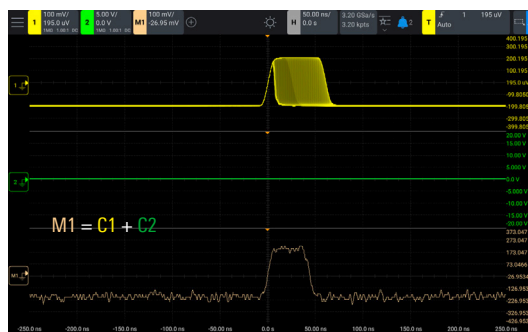
## MXO 4: Measure with confidence and accuracy

- ▶ Provides measurements, math and FFTs with waveform data from all acquired samples
- ▶ Results are always highly accurate; no forced user trade offs between speed and accuracy



## InfiniiVision HD3: Compromised math and measurement accuracy

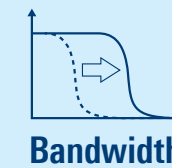
- ▶ Uses a technique common to low-cost oscilloscopes with reduced processing power
- ▶ Measurements, math and FFTs based on a reduced set of data; this forces users to trade off accuracy for update rates



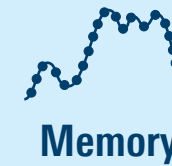
## MXO 4 display features

- ▶ 13.3" high resolution, 1920 × 1080 pixel, Full HD display
- ▶ Configurable toolbar (including undo and redo buttons) for fast access to functions
- ▶ Fast custom layouts with R&S®SmartGrid user interface

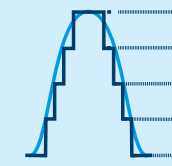
## Advantages of the MXO 4 versus Keysight InfiniiVision HD3



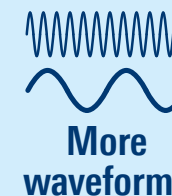
**1.5 ×**  
Bandwidth  
(1.5 GHz versus 1 GHz)



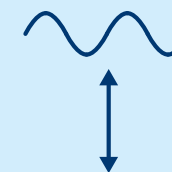
**20 ×**  
More memory  
(400 Mpoints versus 20 Mpoints)



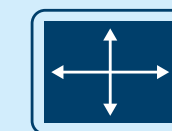
**4 ×**  
Maximum vertical resolution  
(18 bit versus 16 bit)



**3 ×**  
Faster capture rate



**> 3 ×**



**2 ×**  
More pixels

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MXO 4 Series Oscilloscope

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Data without tolerance limits is not binding | Subject to change

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