

Tektronix 5 Series MSO vs. LeCroy HDO-A Series

COMPETITIVE FACT SHEET

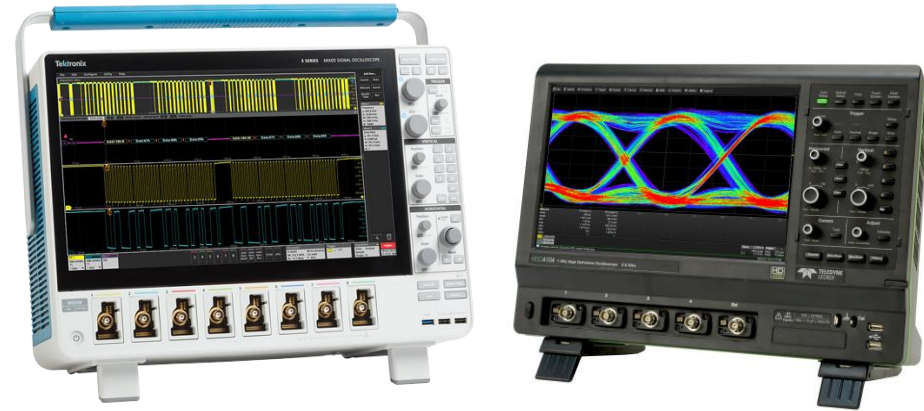
Oscilloscope Design

Tektronix 5 Series MSO

- ✓ **Industry First** FlexChannels (up to 8) (each input is 1 analog or 8 digital)
- ✓ **Industry First** 4, 6, 8 channel models
- ✓ **Industry First** HD 1920 x 1080 15.6" Multi-touch capacitive display
- ✓ **Industry First** Std. embedded OS or Opt. Windows 10 OS
- ✓ 12 bit Analog to Digital Converter
- ✓ Up to 2 GHz models at 6.25GS/s
- ✓ >500,000 wfms/s update rate

LeCroy HDO-A Series

- ✗ Fixed configuration: 4 or 8 analog; 16 digital
- ✗ 4 or 8 channel models only
- ✗ WXGA 12.1" Multi-touch display
- ✗ Windows 7 Only
- ✓ 12 bit Analog to Digital Converter
- ✗ Up to 1 GHz models at 2.5GS/s
- ✗ Not Specified (*tested to 700wfms/s)



Analog to Digital Converter (ADC)

Tektronix 5 Series MSO

- ✓ 12 bit ADC
- ✓ 6.25 GS/s FlexChannel™ (Analog or Digital)
- ✓ Up to 16 bits in **New** High Res mode
- ✓ Up to 8.9 bits ENOB

LeCroy HDO-A Series

- ✓ 12 bit ADC
- ✗ 2.5 GS/s Analog or 1.25 GS/s Digital
- ✗ Up to 15 bits in ERes mode
- ✗ Up to 8.7 bits ENOB

Included Probing

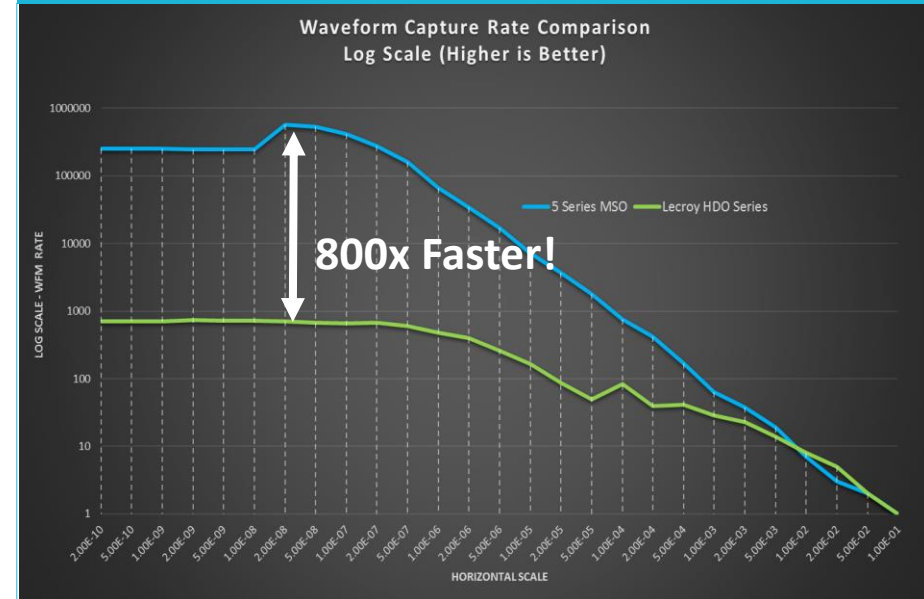
Tektronix 5 Series MSO

- ✓ 1 GHz passive probes (≥1GHz models)
- ✓ 3.9pF Capacitive loading
- ✓ Automated compensation
- ✓ Stores compensation data in memory
- ✓ Comes with one per FlexChannel (up to 8)

LeCroy HDO-A Series

- ✗ 500 MHz passive probes (1GHz models)
- ✗ 10pF Capacitive loading
- ✗ Manual compensation
- ✗ Can't store compensation data
- ✗ Comes standard with 4 probes (even on 8 channel models)

Waveform Capture Rate*



*Tektronix 5 Series and LeCroy HDO series tested max Waveform Capture Rates by Tek March 2017

Tektronix 5 Series MSO vs. LeCroy HDO-A Series

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Key Specifications Comparison

	Tektronix 5 Series MSO		LeCroy HDO-A Series	
Max Bandwidth	✓	Up to 2.0 GHz	✗	Up to 1.0 GHz
Upgradable Bandwidth	✓	Yes	✗	No
Number of Analog Channels	✓	4, 6, or 8 – with FlexChannels™	✗	HDO4000/6000 (4 channels), HDO8000 (8 channels)
Number of Digital Channels	✓	Up to 32, 48, or 64 – with FlexChannels™	✗	Requires MS model to get 16 digital channels
Number of Math / Bus channels / Measurements	✓	As many as you want!	✗	12 math / 4 buses / 12 measurements
Max Analog Sample Rate (all channels)	✓	6.25 GS/s	✗	2.5 GS/s
Max Interpolated Sample Rate	✓	500 GS/s	✗	10 GS/s*
Max Digital Channel Sample Rate (all channels)	✓	6.25 GS/s	✗	1.25 GS/s
Optional Arbitrary Function Generator (AFG)	✓	Yes – 50 MHz	✗	No AFG option
Optional DVM/ Trigger Freq. Counter	✓	Yes – Free with Registration	✗	No DVM / Counter option
Standard Analog Probes (≥1GHz models)	✓	One probe per channel. 1 GHz at 3.9pF	✗	Max four probes. 500MHz probes at 10pF
Passive Probe (auto compensate / remembers data)	✓	Yes / Yes	✗	No / No
Standard Record Length (all channels)	✓	62.5 Mpts	✗	(HDO4000) 12.5 Mpts (HDO6000/8000) 50 Mpts
Max Waveform Capture Rate	✓	>500,000 wfms/s	✗	Not Specified** (measured 700 wfms/sec)
ADC Resolution	✓	12 bits	✓	12 bits
Max Vertical Resolution (with filtering)	✓	Up to 16 bits with New High Resolution mode	✗	Up to 15 bits with ERes
Lowest Hardware Vertical Setting	✓	500uV/div = 5 mV Full Scale	✗	1 mV/div = 8 mV Full Scale
Noise at 10mV Full Scale Voltage*** (Tek's 1mV/div)	✓	~65uV RMS	✗	~77uV RMS
Screen Size & Resolution	✓	15.6" High Definition 1920 x 1080	✗	12.1" WXGA 1280 x 800
Operating System	✓	Std. Embedded OS or optional Windows 10 OS	✗	Windows 7 Only

*10GS/s with a 4 point Sinx/x interpolation, not real A/D samples ** Not specified by LeCroy, but maximum rate measured by Tektronix was 700 wfms/sec *** Noise measured at 10mV Full Scale Voltage with High Res and Eres filters