Tektronix 6 Series MSO vs. Teledyne LeCroy WavePro HD

COMPETITIVE FACT SHEET

Oscilloscope Performance Specs

Tektronix 6 Series MSO

- ✓ 8 GHz & 25 GS/s on four channels
- ✓ Up to 32 digital channels (500MHz, 25GS/s)
- ✓ 100 GS/s of 12-bit ADCs (4x at 25 GS/s), shared for analog or digital FlexChannels™
- ✓ Full HD 1920 x 1080 15.6" Multi-touch capacitive display
- ✓ 1mV/division hardware vertical sensitivity
- ✓ **Industry's Only** Std. embedded OS or Optional Windows 10 OS
- ✓ Field Upgradable Bandwidth 1GHz → 8GHz

LeCroy WavePro HD

- ✗ 8 GHz & 20 GS/s on two channels
- ✗ MS model only - 16 digital channels (250 MHz, 1.25 GS/s)
- ✗ 40 GS/s of 12-bit ADCs (2x at 20 GS/s) for analog channels only
- ✓ Full HD 1920 x 1080 15.6" Multi-touch capacitive display
- ✗ 10mV/division hardware vertical sensitivity
- ✗ Windows 10 OS Only
- ✗ No Upgradable Bandwidth

*The **6 Series MSO** features the same award-winning user interface as the **5 Series MSO***

Noise Performance at low sensitivities

Bandwidth	Volts / Div	6 Series MSO[1,2]		WavePro HD[1,2]
2.5 GHz	1 mV	76.5 µV	✓	155 µV
	5 mV	93.8 µV	✓	155 µV
	10 mV	144 µV	✓	155 µV
4 GHz	1 mV	97.4 µV	✓	228 µV
	5 mV	124 µV	✓	228 µV
	10 mV	192 µV	✓	228 µV
8 GHz	1 mV	158 µV	✓	315 µV
	5 mV	208 µV	✓	315 µV
	10 mV	342 µV	✓	315 µV

Note 1: LeCroy uses 8 divisions full scale, Tektronix uses 10 division full scale; Green checks are given for best noise at % FS
Note 2: All noise levels are at full bandwidth

Channel Bandwidth, Sample Rate & Memory

Tektronix 6 Series MSO

- ✓ 8 GHz, 25 GS/s on four channels
- ✓ 62.5 Mpts Std. Memory on four channels

LeCroy WavePro HD

- ✗ 8 GHz, 20 GS/s on two channels
- ✗ 50 Mpts Std. Memory on four channels

Segmented Memory

Tektronix 6 Series MSO

- ✓ FastFrame™ Max of 671,000 segments
- ✓ Up to 5,000,000 triggers per second
- ✓ 0 s intersegment time

LeCroy WavePro HD

- ✗ Max of 65,535 segments
- ✗ Up to 650,000 triggers per second
- ✗ 1.5 µs intersegment time

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Key Specifications Comparison

	Tektronix 6 Series MSO		LeCroy WavePro HD	
Max Bandwidth (on two channels / four channels)	✓	8 GHz on four channels	✗	8 GHz on two channels / 4 GHz on two channels
Total Sample Rate in Oscilloscope	✓	100 GS/s of sample rate (4x 25 GS/s ADCs)	✗	40 GS/s of sample rate (2x 20 GS/s ADCs)
Analog Sample Rate (two channels / four channels)	✓	25 GS/s on four channels	✗	20 GS/s two channels / 10 GS/s four channels
Field Upgradable Bandwidth options	✓	Yes	✗	Not Available
Number of Digital Channels	✓	Up to 32 – with FlexChannels probes (4x TLP058)	✗	MS model provide only 16 digital channels
Digital Channel details	✓	25 GS/s, 500 MHz, individual thresholds, +/-40 V	✗	1.25 GS/s, 250 MHz, 8 grouped thresholds, +/-30 V
Number of Math / Bus channels / Measurements	✓	As many as you want! (until memory runs out)	✗	12 math / 4 buses / 12 measurements
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 Record Length (on four channels)	✓	62.5 Mpts	✗	50 Mpts
Max Optional Record Length (on four channels)	✗	250 Mpts (optional)	✓	2.5 Gpts (optional)
Max Segmented Memory segments	✓	>691,000 segments	✗	65,535 segments
Waveform Capture Rate (non-segmented memory)	✓	>500,000 wfms/s	✗	Not Specified
Effective Number of Bits (ENOB)[1, 2]	✓	8.2 bits (1 GHz), 7.6 bits (2.5 GHz), 7.25 bits (4GHz)	✓	7.8 bits (2.5 GHz), 7.5 bits (4GHz)
DC Gain Accuracy	✓	+/- 1.0% Warranted all gain settings, PV provided	✗	+/- 0.5% (0V offset only, no PV process to check)
Visual Trigger (graphical drawn areas)	✓	Yes	✗	Not Available
Floating Licenses (swap licenses between scopes)	✓	Yes – optional floating license can be purchased	✗	Not Available
Operating System	✓	Std. Embedded OS or optional Windows 10 OS	✗	Windows 10 Only
TriMode Probe (differential, single, common mode)	✓	*New* TDP7700 Series – up to 8 GHz	✗	Not Available
Analysis / Compliance Packages	✗	Jitter, Power, USB, Automotive, more coming soon	✓	Jitter, Power, USB, PCIe, Automotive, Ethernet, MIPI, DDR

Note 1: Tektronix scopes have been optimized for noise reduction, flatness, INL/DNL ADC linearity calibration and many other areas that don't show up in a head to head matchup with ENOB, but is thoroughly optimized for measurement accuracy.
Note 2: Tektronix ENOB is tested at 90% full scale, 500mV Full Scale; LeCroy is tested at 87.5% of full scale at 800mV Full Scale.

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