

# Keysight Competitive Comparison

## Keysight 6000 X-Series versus Teledyne-LeCroy HDO4000/6000

### Keysight 6000 X-Series

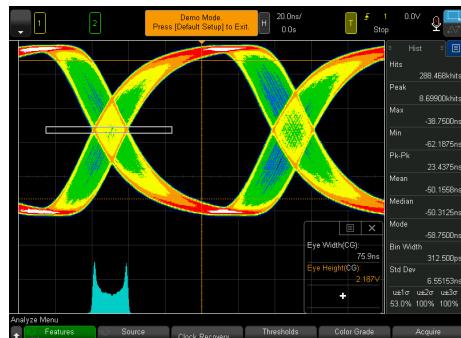


### Teledyne-LeCroy HDO4000/6000



The Keysight Technologies, Inc. 6000 X-Series oscilloscopes offer bandwidths up to 6 GHz with the key benefits of the InfiniiVision line: affordability, excellent visualization, 6-in-1 integration and investment protection. Speed your debugging with its uncompromised fast update rate, combined with the industry's only hardware zone trigger. Operation is simplified with a localized GUI that is designed for touch and the industry's first 12.1" multi-touch capacitive display. Voice control makes doing oscilloscope inputs easy while your hands are holding probes.

	LeCroy HDO4000/6000	Keysight 6000 X-Series
Bandwidth	Up to 1 GHz	✗ Up to 6 GHz
Upgradable bandwidth	No	✗ Yes – license key
Max sampling rate	Up to 2.5 GSa/s	✗ Up to 20 GSa/s
Std memory depth	Up to 50 M	✓ Up to 4 M
ADC bits	12 bits	✓ 8 bits
Noise at 1 mV/div	151 uV RMS 1 GHz to 50 Ω	✗ 115 uV RMS
Waveform update rate	< 1,000 wfms/s	✓ Up to 450,000 wfms/s
Zone trigger	Not available	✗ Yes – hardware-based > 100 K triggers/s
Display	12.1" resistive touch	✗ 12.1" capacitive multi-touch
Other integration	Not available	✗ 2 ch AWG, counter, DVM
Operating system	Windows 7	✗ Embedded
Std passive probe	500 MHz	✗ 700 MHz
Voice control	No	✗ Yes – localized
Knob per vertical channel	No – muxed	✗ Yes
Operating range	5 to 40 °C, 3,048 M	✗ 0 to 50 °C, 4,000 M
Calibration interval	1 year	✗ 2 years
Mean time between failure	Not specified	✗ > 120,000 hours
BenchVue support	Not available	✗ Yes



Jitter/RTE



FFT



Protocol



Built-in AWG



Infrequent glitches and signal jitter captured after one second on 6000 X-Series with standard update rate.



DPO7000 after 60 seconds. It never sees the glitches and shows limited signal jitter due to its slow update rate.



A fast update rate allows you to see an infrequent glitch, but then you want to isolate it. With the 6000 X-Series' hardware zone trigger, you can draw a box to isolate the signal of interest. If you can see it, you can trigger on it.

