Keysight Technologies
6000 X-Series versus Teledyne-LeCroy 6Zi

10X Zoom

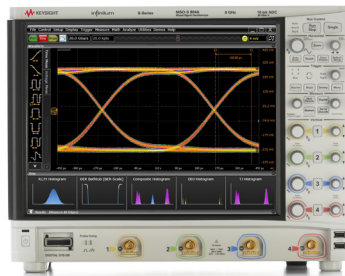Keysight DSOS404A (4 GHz)

10X Zoom

LeCroy 604Zi (4 GHz)

Keysight 15"

LeCroy 12.1"

A 15" multi-touch capacitive display offers significantly more viewing area and much greater sensitivity to user inputs.

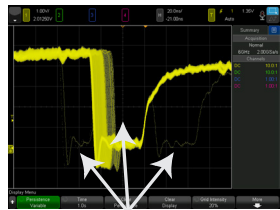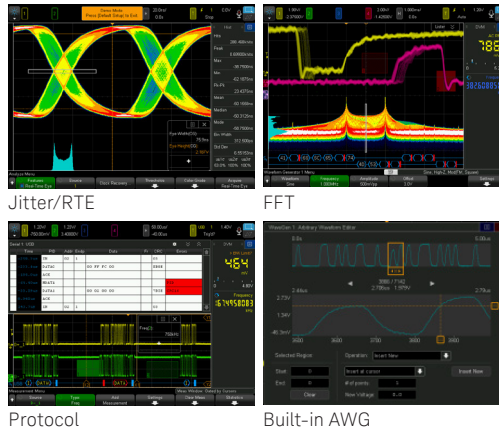**KEYSIGHT TECHNOLOGIES**

Keysight S-Series

Teledyne-LeCroy 6Zi Series

The Keysight Technologies, Inc. S-Series oscilloscopes provide bandwidths up to 8 GHz with class-leading signal integrity and analysis. Custom ASICs, including the industry's first 40 GSa/s, 10-bit ADC, allow you to see your real signal. Class-leading deep memory and a large suite of analysis tools complement a designed-for-touch user interface and the industry's first 15" multi-touch capacitive display.

	LeCroy 6Zi		Keysight S-Series	
Bandwidth	Up to 4 GHz	x	Up to 8 GHz	√
Upgradable bandwidth	No	x	Yes – license key	√
Max sampling rate	40 GSa/s on 2.5/4 GHz	√	20 GSa/s on all models	x
	20 GSa/s on 400/600/½ GHz	√		√
Standard (4 ch) memory depth	16 Mpts	x	50 Mpts	√
Max memory depth (2 ch)	128 Mpts	x	800 Mpts	√
ADC bits	8 bits	x	10 bits	√
Noise at 5 mV/div 4 GHz to 50 Ohms	400 uV RMS	x	173 uV RMS	√
Display	12.1" resistive touch	x	15" capacitive multi-touch	√
Knob per vertical channel	No – muxed	x	Yes	√
Internal drive	HDD	x	SSD	√
Offline analysis software	No	x	Yes	√
Math functions	8	x	16	√
Mean Time Before Failure (typical)	Not specified	x	110,000 hours	√
Time scale accuracy	± 1,500 ppb	x	± 75 ppb	√
BenchVue support	Not available	x	Yes	√

Keysight Technologies
6000 X-Series versus Teledyne-LeCroy 6Zi

Jitter/RTE

FFT

Protocol

Built-in AWG

Keysight's 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.

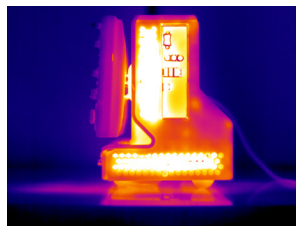|	LeCroy 6Zi		Keysight 6000 X-Series	
Bandwidth	Up to 4 GHz	x	Up to 6 GHz	√
Upgradable bandwidth	No	x	Yes – license key	√
Max sampling rate	Up to 40 GSa/s	√	Up to 20 GSa/s	x
Standard memory depth	Up to 32 M	√	Up to 4 M	x
Noise at 5 mV/div 4 GHz to 50 Ohms	400 uV RMS	x	220 uV RMS at 3 GHz 276 uV RMS at 6 GHz	√
Waveform update rate	Up to 580 wfms/s using WaveStream™	x	Up to 450,000 wfms/s	√
Zone trigger	Not available	x	Yes – hardware-based > 100 K triggers/s	√
Hardware-based serial decode and mask	No – software based	x	Yes	√
Display	12.1" resistive touch	x	12.1" capacitive multi-touch	√
Other integration	Not available	x	2 ch AWG, counter, DVM	√
Operating system	Windows 7	x	Embedded	√
Standard passive probe	500 MHz	x	700 MHz	√
Localized GUI	No	x	Yes	√
Standard calibration interval	1 year	x	2 years	√
Voice control	No	x	Yes – localized	√
Depth, weight	8.9", 25.4 lbs	x	6.1", 15 lbs	√
Operating range	5 to 40 °C, 3,048 M	x	0 to 50 °C, 4,000 M	√
Power	Up to 500 W	x	Up to 250 W	√
Mean Time Between Failure (MTBF)	Not specified	x	> 120,000 hours	√
BenchVue support	Not available	x	Yes	√

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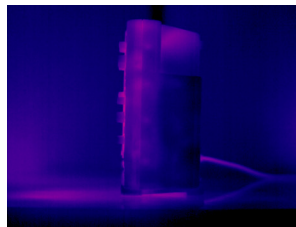

6Zi after 60 seconds using "WaveStream" Fast Viewing Mode – it never sees the glitches and shows limited signal jitter due to its slow update rate.
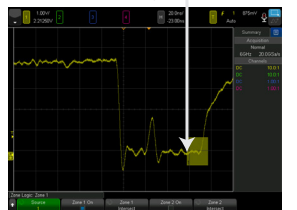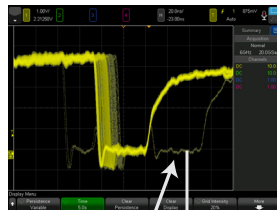
A fast update rate allows you to see an infrequent glitch, but then you want to isolate it. With the 6000 X-Series' hardware zone trigger, you just draw a box to isolate the signal of interest. If you can see it, you can trigger on it.

LeCroy 6Zi consumes double the max power and runs significantly hotter than the 6000 X-Series.

The 6000 X-Series' low power consumption helps it reach an excellent MTBF of > 120,000 hours.

For more information on Keysight Technologies' products, applications or services, please contact your local Keysight office. The complete list is available at: www.keysight.com/find/contactus

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