

Competitive Comparison: Agilent 9000 H-Series vs. Danaher Tektronix 5000 Series



See Your Signals in HD - The high-definition 9000 H-Series oscilloscope offers up to 12 bits of resolution, which represents 4096 quantization levels, for precision signal viewing. The 9000 H-Series' combination of hypersampling and linear noise reduction technology achieves a noise level up to three times lower than traditional 8-bit oscilloscopes. It is specifically engineered to provide low noise and high-dynamic-range measurement capability in key applications such as medical, automotive, consumer devices, and power analysis.





See Your Signals in HD

• Precision signal viewing

Reveal hidden signal detail with 16X more resolution and up to 3X less noise.

Comprehensive measurement capability

Get optional digital channels, more than 20 applications, and ultrasensitive current probes for a complete oscilloscope solution.

| | Agilent 9000 H-Series | | Danaher Tektronix 5000 | |
|---|--------------------------------|--------------|--|--------------|
| Bandwidth | 250 MHz, 500 MHz, 1 GHz, 2 GHz | \checkmark | 350 MHz, 500 MHz, 1 GHz, 2 GHz | \checkmark |
| Bits of resolution | Up to 12 bits | \checkmark | 8 bits | Х |
| Max sample rate | Up to 10 GSa/s | \checkmark | 5 GSa/s | \checkmark |
| Noise @ 100 mV/div @ 1 GHz | 1.1 mV | \checkmark | 3.0 mV | Х |
| Std. memory depth (4 ch) | 50 M | \checkmark | 12.5 M | Х |
| Max memory depth (4 ch) | Up to 500 M | \checkmark | Up to 125 M | Х |
| Display size | 38.8 cm (15″) | \checkmark | 26.4 cm (10.4″) | Х |
| Update rate (1 kPts) | 1100 wfms/sec | \checkmark | 35 wfms/sec (DPX special mode with limitations) | Х |
| DPX mode | No | Х | Yes | \checkmark |
| SSD | Available as option | \checkmark | Available as option | \checkmark |
| Standard probes | 500 MHz passive | Х | 1 GHz passive | \checkmark |
| Pushable front panel knobs, vernier scaling | Yes | \checkmark | No | Х |



Example of Agilent 9000 H-Series and Tektronix 5000 Series oscilloscopes zooming in on the top of a 350 mV square wave.



The 9000 H-Series high-definition oscilloscopes are ideal for making high-sensitivity current measurements. The N2820A/N2821A current probes can measure currents as low as 50 μ A and as high as 5 A via two-channel mode. When these probes are used with a 9000 H-Series oscilloscope, it gives you the ability to accurately measure total current consumption, which is the total area under the current curve.

Channel 1 High-Sensitivity "Zoomed-In" View (6.7 mA/div)

Channel 2 "Zoomed-Out" View (40 mA/div)





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Tektronix 8-bit 5000 Series

Serial protocol trigger and decode

Serial protocol decode and trigger: Quickly move between physical and protocol layer information using the time-correlated tracking marker. Display protocol content using waveform symbols and the industry's first multi-tab protocol viewer. The packets tab shows a high-level view of the packet over time.





Agilent 12-bit 9000 H-Series

InfiniiView oscilloscope analysis software

With Agilent's InfiniiView oscilloscope analysis software, you can capture waveforms on your scope, save them to a file, and open the data record in Agilent's InfiniiView application. View, analyze, share, and document scope measurements anywhere your PC goes.



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