

Industry Comparison Guide: Infiniium 90000 X-Series versus Tektronix 70000C Series Oscilloscopes

32 GHz of true analog bandwidth that delivers

- The industry's highest measurement accuracy* – In side by side comparisons the Infiniium 90000-X Series will measure more accurately (closer to reality) than any other real-time oscilloscope
- The industry's highest probing bandwidth (30 GHz)* – You are only as good as your probe, combine the 90000-X Series with InfiniiMax III probing system for 30 GHz of probing bandwidth
- The industry's most comprehensive software specific applications* – Get your job done faster with the most applications available



	Infiniium 90000-X Series		Tektronix 70000C	
Maximum analog bandwidth	32 GHz	✓	16 GHz	✗
Maximum bandwidth (4 channel)	16 GHz	✗	20 GHz	✓
Maximum memory depth	2 G - 4 channels	✓	256 Mpts	✗
Sample rate (2 channel)	80 GSa/s	✗	100 GSa/s	✓
Noise floor at 20 GHz (100 mV/div)	0.41% FS	✓	0.74% FS	✗
Jitter measurement floor	150 fs	✓	300 fs	✗
Maximum probing bandwidth	30 GHz	✓	20 GHz	✗
Bandwidth upgradeable	Yes to 32 GHz	✓	Yes to 20 GHz	✗
Captures off screen data	Yes	✓	No	✗
Number of compliance applications	> 20	✓	> 20	✓
Effective bits at 20 GHz	5.8	✓	5.1	✗
Effective bits at 20 GHz bandwidth (10 GHz)	5.8	✓	3.1	✗

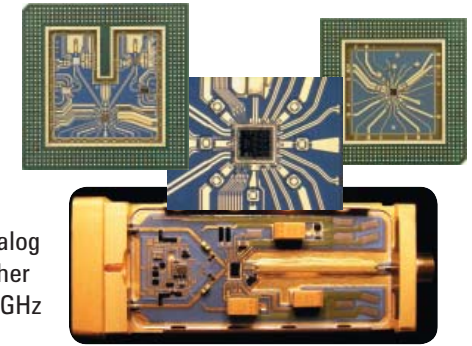


Agilent Technologies

Engineered for 32 GHz of true analog bandwidth that delivers

How did we achieve this?

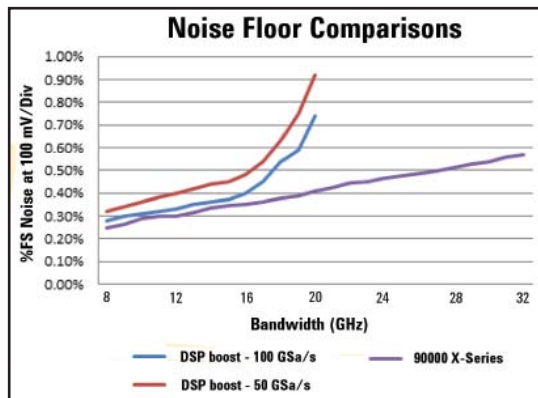
Agilent Technologies has hardware performance to 32 GHz, Tektronix uses a technique known as DSP boosting to achieve its 20 GHz. While this technique allows for higher bandwidth, it increases the noise density and causes significant interleaving errors, which means measurement errors. The 90000-X Series uses custom Indium Phosphide chips and signal integrity expertise to achieve true analog bandwidth to 32 GHz. The oscilloscope uses no DSP boosting to achieve this performance, which means you don't have to make a higher noise density tradeoff to achieve high bandwidth. It also means you get the highest measurement accuracy, whether you are using 16 GHz of bandwidth or 32 GHz.



It provides the highest measurement accuracy

The 90000-X Series provides true analog bandwidth above 16 GHz which gives you the following:

1. The industry's lowest noise floor
2. The industry's lowest jitter measurement floor
3. The industry's flattest frequency response



Oscilloscope noise is the largest single contributor to measurement errors. The 90000-X Series has less than 1/2 the noise of the Tektronix 70000C.

It provides the highest probing bandwidth

The InfiniiMax III probing system, provides the industry's highest probing bandwidth 30 GHz and:

1. Custom probe amplifier characterization
2. The industry's only AC calibration
3. The industry's only bandwidth upgradeability

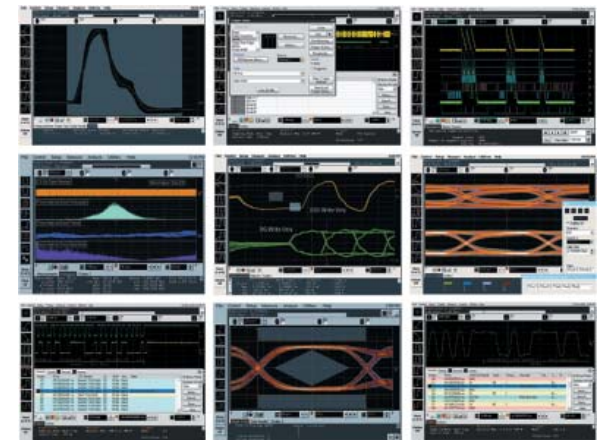


A measurement system is only as good as its highest bottleneck. The InfiniiMax III probing system provides 30 GHz of bandwidth to ensure high bandwidth probing.

It provides the most comprehensive software specific applications

The 90000-X Series provides the largest breadth of applications, so you get your job done faster:

1. Over 40 applications
2. First to market compliance applications
3. The only user-defined application



Whether you are doing analysis, including jitter, de-embedding, or equalization, compliance, or protocol analysis, Agilent has the software that you need.

Product specifications and descriptions in this document subject to change without notice.

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Printed in USA, April 2, 2011
5990-7772EN



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