



Industry Comparison Guide: Agilent InfiniiVision Oscilloscopes versus Tektronix 4000 Oscilloscopes

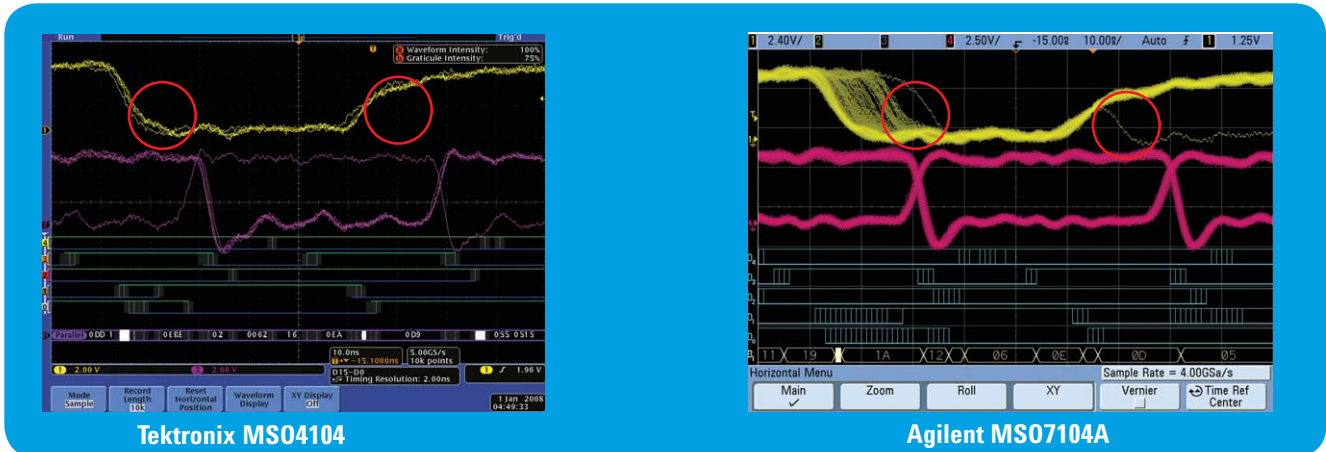
Choosing your next oscilloscope?

The Agilent InfiniiVision family of oscilloscopes is engineered for the industry's best signal visibility

- **Attractive:** Choose from a variety of form factors designed to meet your needs and budget.
- **Fast and Responsive:** Custom MegaZoom III technology delivers the fastest waveform update rates in the industry.
- **Smart:** 11 applications give you more rapid insight into common problems.



KEY CONSIDERATION: When probing your signals, how confident are you that your scope will capture important details? Put both scopes to the 5 second test.



Tektronix MSO4104

Agilent MSO7104A

Measurements Conditions: The metastable glitch on channel 1 occurs about 200 times per second. Additional analog and digital channels on each MSO probe other signals. Hold probe on channel-1 signal for 5 seconds. What's the probability that you'll see the glitch?

Step	Oscilloscope Setup	Timebase	Tektronix MSO4104		Agilent MSO7104A	
			Waveform update rate	Glitch capture probability	Waveform update rate	Glitch capture probability
#1	Display analog channels only	20 ns/div	55,000/sec	99.99%	95,000/sec	99.99%
#2	Change timebase setting ¹	10 ns/div	2,300/sec	20.54%	60,000/sec	99.75%
#3	Add logic channels	10 ns/div	125/sec	1.24%	60,000/sec	99.75%
#4	Add serial decode	10 ns/div	30/sec	0.30%	60,000/sec	99.75%
#5	Add deep memory ²	10 ns/div	18/sec	0.18%	60,000/sec	99.75%

1. Screen images above captured at this setup

2. 10M points manually selected on Tektronix, Agilent always optimized deep memory usage

Agilent's uncompromised waveform update rates deliver:

- Best probability of capturing infrequent events
- Richest sign detail
- Most responsive scope controls



Agilent Technologies

	Consideration	Agilent InfiniiVision MSO (5000, 6000 and 7000 Series)	Tektronix MSO4000
Key Specifications	Bandwidth	100 MHz to 1 GHz	350 MHz to 1 GHz
	Channels	2 or 4 analog + 16 digital	2 or 4 analog + 16 digital
	Sample rate	2 GSa/s to 4 GSa/s	2.5 GSa/s to 5 GSa/s
	Max Memory Depth	8 Mpts	10 Mpts
Attractive	Display size	12.1" XGA(7000 Series)	10.4" XGA
	Form Factor	Portable, bench, 1U rack mount	Bench
	DSO to MSO upgrade	10 minute user installed	None
Fast	Update Rate – Scope channels only	100,000 waveforms/sec	50,000 waveforms/sec
	Update Rate - MSO	100,000 waveforms/sec	130 waveforms/sec max
	Digital sample rate w/full memory	Up to 2 GSa/s	Up to 500 MSa/s
Smart	Serial trigger and decode	I ² C, SPI, CAN, LIN, RS-232/UART	I ² C, SPI, CAN, RS-232/UART,
	Other applications	FPGA Debug, Segmented Memory, Power Measurements, Vector Signal Analysis, battery operation	FPGA debug (available from 3 rd party only)
	Hardware accelerated serial decode	Yes	None
	Offline viewing, analysis and data sharing	Yes, PC-based	None
	WaveInspector software	None	Yes, for local viewing and analysis only

There is no substitute for experiencing the power of the Agilent InfiniiVision Series Oscilloscope.

Visit www.agilent.com/find/7000comp to download application note 5989-7885EN "Evaluating Oscilloscopes for Best Signal Visibility" you can also view online videos or request an evaluation unit.

Phone

Americas

Canada	(877) 894-4414
Latin America	305 269 7500
United States	(800) 829-4444

Asia Pacific

Australia	1 800 629 485
China	800 810 0189
Hong Kong	800 938 693
India	1 800 112 929
Japan	81 426 56 7832
Korea	080 769 0800
Malaysia	1 800 888 848
Singapore	1 800 375 8100
Taiwan	0800 047 866
Thailand	1 800 226 008

Europe

Austria	0820 87 44 11
Belgium	32 (0) 2 404 93 40
Denmark	45 70 13 15 15
Finland	358 (0) 10 855 2100
France	0825 010 700
Germany	01805 24 6333* *0.14€/minute
Ireland	1890 924 204
Italy	39 02 92 60 8484
Netherlands	31 (0) 20 547 2111
Spain	34 (91) 631 3300
Sweden	0200-88 22 55
Switzerland	(French) 44 (21) 8113811 (Opt 2)
Switzerland	(German) 0800 80 53 53 (Opt 1)
United Kingdom	44 (0) 7004 666666

Other European countries:

www.agilent.com/find/contactus

Revised: March 23, 2007

www.agilent.com

For more information on Agilent Technologies' products, applications or services, please contact your local Agilent office. The complete list is available at:

www.agilent.com/find/contactus

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

© Agilent Technologies, Inc. 2001, 2009

Printed in USA, August 26, 2009
5989-7911EN



Agilent Technologies