Competitive Comparison

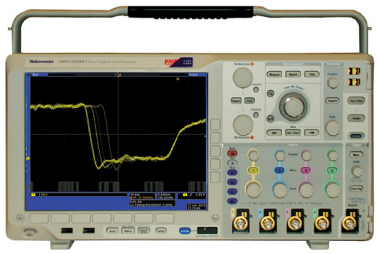
Keysight InfiniiVision 3000 X-Series vs. Danaher-Tektronix DPO/MSO4000 Oscilloscopes

Keysight Technology, Inc.'s new 3000 X-Series oscilloscopes use breakthrough technology to deliver value, functionality and flexibility at prices that fit into existing budgets. Using an Keysight-designed *MegaZoom* IV Custom ASIC technology, the 3000 X-Series provides unprecedented signal visibility with over 1,000,000 waveforms per second. The 3000 X-Series is the industry's first 5-in-1 product with a full-featured scope, logic analyzer, protocol analyzer, function/arbitrary waveform generator and digital voltmeter (DVM) all integrated into one design with a large, 8.5-inch display.

InfiniiVision 3000 X-Series

- 1,000,000 wfms/s
- 5 instruments in 1
- Fully upgradable

Keysight-designed *MegaZoom* IV custom ASIC technology powers the fastest waveform update rates, responsive deep memory, integrated MSO, integrated industry-exclusive WaveGen, and integrated protocol analyzer.



	Keysight 3000 X-Series		Danaher-Tektronix DPO/MS04000		Danaher-Tektronix DPO/MSO4000B-L	
Bandwidth	100/200/350/500 MHz, 1 GHz	■	350, 500 MHz, 1 GHz	□	1 GHz	□
Channels	2, 4	■	4 only	□	2, 4	■
Upgradable bandwidth	Yes	■	No	□	No	□
Maximum sampling rate	5 GSa/s (1 GHz)	■	5 GSa/s (1 GHz)	■	2.5 GSa/s (1 GHz)	□
	4 GSa/s (100 - 500 MHz)	■	2.5 GSa/s (350 - 500 MHz)	□	N/A	□
Maximum memory depth	4 Mpts	□	20 Mpts	■	5 Mpts	□
Maximum full channel SR	2.5 GSa/s (1 GHz)	□	5 GSa/s (1 GHz)	■	2.5 GSa/s (1 GHz)	□
	2 GSa/s (100-500 MHz)	□	2.5 GSa/s (350-500 MHz)	■	N/A	□
Maximum full channel memory	2 Mpts	□	20 Mpts	■	5 Mpts	□
Memory depth default	Always maximized	■	10 kpts	□	10 kpts	□
Segmented memory option	Yes	■	No	□	No	□
Update rate	>1,000,000 wfms/s	■	55,000 wfms/s	□	55,000 wfms/s	□
Display	8.5" WVGA	□	10.4" XGA	■	10.4" XGA	■
Function generator/AWG	Yes	■	No	□	No	□
Integrated Digital Voltmeter (DVM)	Yes	■	No	□	No	□
Upgradable MSO	Yes	■	No	□	No	□
Hardware-based serial decode	Yes	■	No, software based	□	No, software based	□
Standard calibration time period	2 years	■	1 year	□	1 year	□

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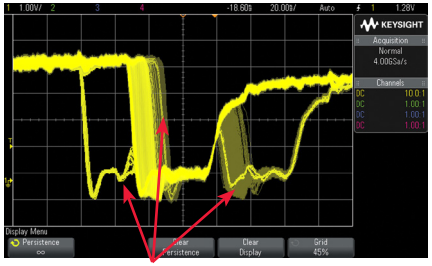
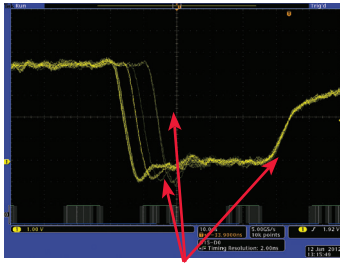
See more

Of your signal, more of the time:

– >1,000,000 waveforms per second update rate allows you to see infrequent events and subtle signal detail that the DPO4000B will miss



Infrequent glitches and signal jitter captured after 1 second on 3000 X-Series with >1,000,000 wfms/s



DPO4000B after 20 seconds—it never sees the glitches and shows limited signal jitter due to its slower update rate

Three-Year Warranty
www.keysight.com/find/ThreeYearWarranty

www.keysight.com/find/3000X-Series

Do more

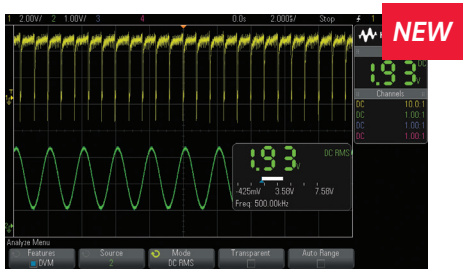
With the power of 5 instruments in 1:

– Best-in-class oscilloscope
Industry's only upgradable scope from 100 MHz through 1 GHz
– Protocol analyzer
Hardware-based serial decode
– Logic timing analyzer (MSO)
Integrated, upgradable MSO
– WaveGen 20 MHz built-in function/ arbitrary waveform generator
Industry-exclusive
– Integrated 3-digit voltmeter
Industry-exclusive

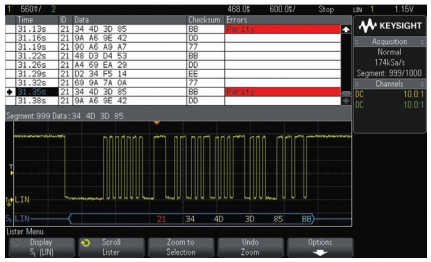
Get more

Investment protection and productivity:

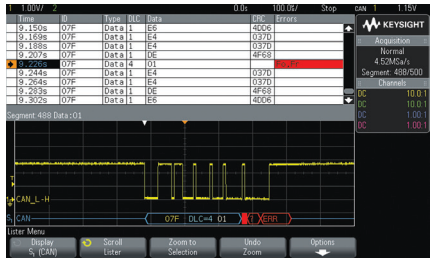
– Upgradable bandwidth through 1 GHz
– Upgradable MSO
– Upgradable memory
– Upgradable WaveGen 20 MHz built-in function/arbitrary waveform generator
– Upgradable Digital Voltmeter
– Upgradable measurement applications



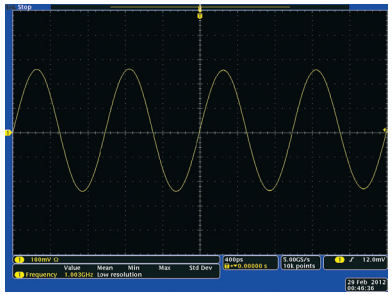
Integrated Digital Voltmeter (DVM) allows you to characterize signals independent of the scopes triggering system.



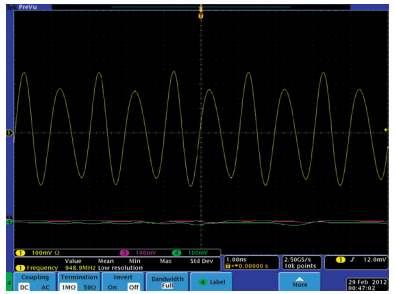
Hardware-based serial decode: Infrequent LIN bus parity error captured on the 3000 X-Series in less than a second.



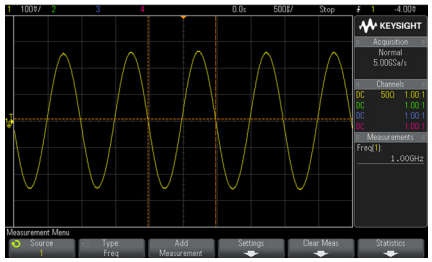
Segmented memory: 500 CAN serial packets over 9 seconds, captured at a high sample rate.



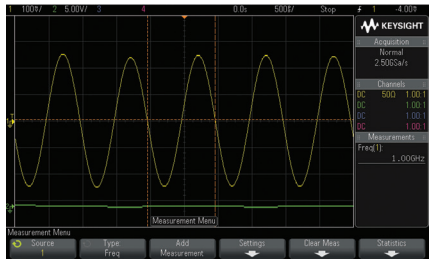
1 GHz sine wave captured on Tektronix 1 GHz scope* at 5 GSa/s sample rate in half-channel mode.



Same 1 GHz sine wave captured on 1 GHz scope* at 2.5 GSa/s sample rate. Does not provide accurate 1 GHz signal reproduction on all channels simultaneous.



1 GHz sine wave captured on Keysight 1 GHz 3000 X-Series scope at 5 GSa/s sample rate in half-channel mode.



Same 1 GHz sine wave captured on Keysight 1 GHz 3000 X- scope at 2.5 GSa/s sample rate. Provides accurate 1 GHz signal reproduction on all channels simultaneous.

* Tektronix MDO4104-6 1 GHz scope model tested with 5 GSa/s half-channel sample rate, 2.5 GSa/s full channel sample rate. Tektronix 1 GHz DPO/MSO4000B-L series scopes only provide a maximum 2.5 GSa/s full channel sample rate.

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