

Agilent InfiniiVision 3000 X-Series versus Tektronix DPO/MSO3000 Oscilloscopes

Agilent's new 3000 X-Series oscilloscopes use breakthrough technology to deliver value, functionality and flexibility at prices that fit into existing budgets. Using an Agilent-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, and a function/arbitrary waveform generator, digital voltmeter all integrated into one design with a large, 8.5-inch display.



InfiniiVision 3000 X-Series

- 1,000,000 waveforms per second
- 5 instruments in 1
- Fully upgradable

Agilent-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



	Agilent 3000 X-Series		Tektronix DPO/MSO3000	
Bandwidth	100 MHz, 200 MHz, 350 MHz, 500 MHz, 1 GHz	✓	100 MHz, 300 MHz, 500 MHz	✗
Upgradable bandwidth	Yes	✓	Not available	✗
Maximum sampling rate	5 GSa/s	✓	2.5 GSa/s	✗
Maximum memory depth	4 M	✗	5 M	✓
Maximum full channel SR	2.5 GSa/s	✗	2.5 GSa/s	✓
Maximum full channel memory	2 M	✗	5 M	✓
Display	8.5-inch WVGA (800 x 480)	✓	9-inch WVGA (800 x 480)	✓
Update rate	> 1,000,000 wfms/s	✓	55,000 wfms/s	✗
Mixed signal oscilloscope	Yes – 16 channels integrated	✓	Yes – 16 channels integrated	✓
Upgradable MSO	Yes	✓	No	✗
WaveGen built-in function/arbitrary waveform generator	Yes	✓	Not available	✗
Integrated Digital Voltmeter	Yes	✓	No	✗
Serial trigger, decode, search	I ² C, SPI, RS232, CAN, LIN, MIL-STD 1553, ARINC 429, FlexRay, I ² S	✓	I ² C, SPI, RS232, CAN, LIN, I ² S	✓
Hardware-based serial decode	Yes	✓	No	✗
Segmented memory	Yes	✓	Not available	✗
Hardware-based mask test	Yes – up to 240,000 tests per second	✓	Not available	✗

Anticipate — Accelerate — Achieve



Agilent Technologies

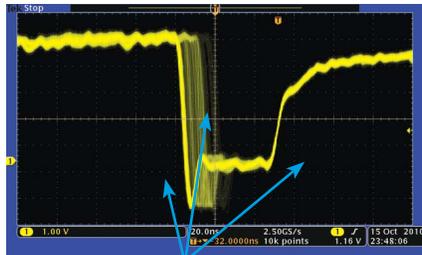
See more

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 DPO3000 will miss



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



DPO3000 after 20 seconds—it never sees the glitches and shows limited signal jitter due to its slower update rate

Do more

With the power of 5 instruments in 1:

- Best-in-class oscilloscope**
Provides features not normally found in this class of scope such as a large display, deep memory, and powerful triggering
- Protocol analyzer**
Provides protocol-aware triggering, decode, search, and navigation for serial buses.
- Logic timing analyzer (MSO)**
Ideal for R&D engineers on a tight budget who need more than the traditional 2 or 4 analog channels.
- Industry-exclusive WaveGen 20 MHz built-in function/arbitrary waveform generator**
Ideal for educational or design labs where bench space and budget are limited
- Integrated Digital Voltmeter**
Provides a 3-digit voltmeter measurements (DVM) and 5-digit counter measurements inside the oscilloscope. The voltmeter operates through the same probes as the oscilloscope channels

Get more

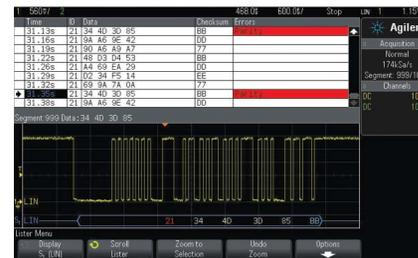
Investment protection and productivity:

- Upgradable bandwidth
- Upgradable MSO
- Upgradable memory
- Upgradable WaveGen 20 MHz built-in function/arbitrary waveform generator
- Upgradable Digital Voltmeter
- Optional measurement applications

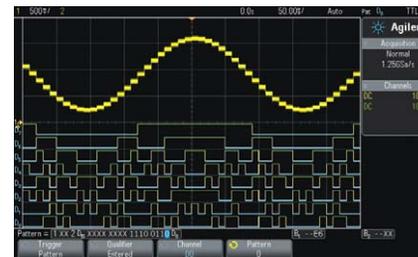
Buy only what you need today. Simple, after purchase upgrades protect your investment and allow you to enhance your equipment as your needs change.



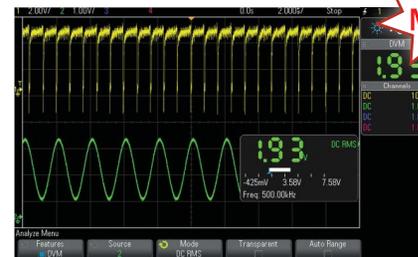
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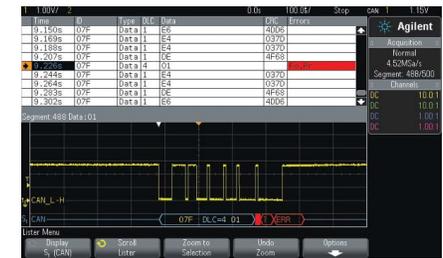
Infrequent LIN bus parity error captured on the 3000 X-Series in less than a second due to hardware-based serial decode



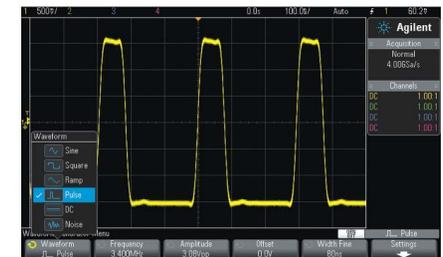
3000 X-Series MSO adds 16 integrated digital channels for extra triggering and analysis; DSO models are customer-upgradable to MSO models



Integrated digit voltmeter (DVM) allows you to characterize signals independent of the scopes triggering system



500 CAN serial packets over 9 seconds, captured at a high sample rate, using the 3000 X-Series's segmented memory



3000 X-Series industry-exclusive WaveGen function/arbitrary waveform generator saves money and bench space



www.agilent.com

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

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