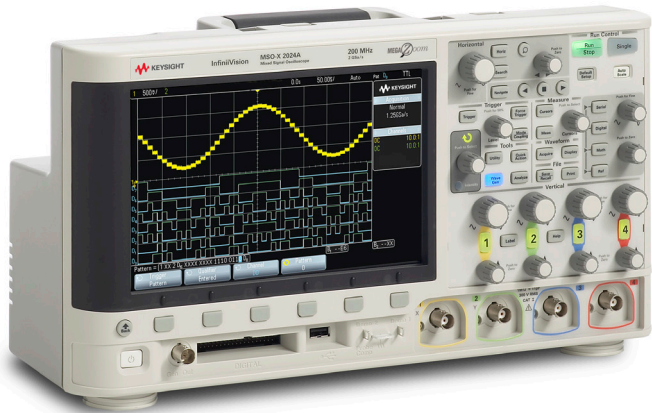# Keysight Technologies
2000 X-Series versus Danaher Tektronix DPO2000B Oscilloscopes
### Competitive Comparison

The Keysight Technologies, Inc. new 2000 X-Series oscilloscopes use breakthrough technology to deliver value, functionality, and flexibility at prices that fit into existing budgets. The 2000 X-Series offers an 8.5-inch WVGA high resolution display and our new industryexclusive integrated function generator, digital voltmeter and logic analyzer. Keysight-designed MegaZoom IV Custom ASIC technology allows you to see more signal detail with update rates of over 50,000 waveforms per second. Now with hardware serial decode and deeper memory..

InfiniiVision 2000 X-Series

· 50,000 waveforms per second
· 5 instruments in 1
· Fully upgradable

Keysight-designed MegaZoom IV custom ASIC technology powers the fastest waveform update rates, integrated MSO,integrated industry exclusive WaveGen, and responsive deep memory.
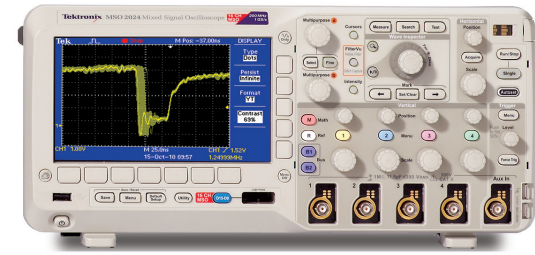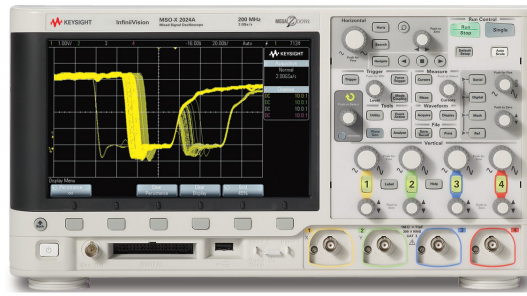
	Keysight 2000 X-Series		Danaher Tektronix DPO2000B	
Bandwidth	70 MHz, 100 MHz, 200 MHz	√	70 MHz, 100 MHz, 200 MHz	√
Upgradable bandwidth	Yes	√	No	X
Maximum sampling rate	Up to 2 GSa/s (2X more)	√	Up to 1 GSa/s	X
Memory depth	Up to 1 Mpt	√	Up to 1 Mpt	√
Display	8.5-inch WVGA (800 x 480) (> 47% viewing area and 3.4X more resolution)	√	7-inch WQVGA (480 x 234)	X
Function generator	Yes – integrated	√	No	X
Mixed signal oscilloscope	Yes – 8 channels	X	Yes – 16 channels (2X more)	√
Upgradable MSO	Yes	√	No	X
Update rate	> 50,000 wfms/s (10X more)	√	Up to 5,000 wfms/s	X
Segmented memory	Yes	√	No	X
Hardware-based mask test	Yes – up to 50,000/sec	√	No	X
Serial support	I2C, SPI, RS232, CAN, LIN	√	I2C, SPI, RS232, CAN, LIN	√
Hardware serial decode	Yes	√	No	X
Hardware serial decode	5 years [1]	√	5 years	√

1. Applies to all orders on or after January 1, 2013.

See more

Of your signal, more of the time:

- An 8.5-inch WVGA display offers 50% more viewing area and > 3 times more resolution versus a 7-inch QVGA display
- > 50,000 waveforms per second update rate allows you to see infrequent events and subtle signal details that the DPO2000B will miss
- 64 Levels of intensity grading in the 2000 X-Series shows significantly more signal detail than 2 levels of intensity grading in the DPO2000B

2000 X-Series 8.5inches
DPO2000B 7 inches
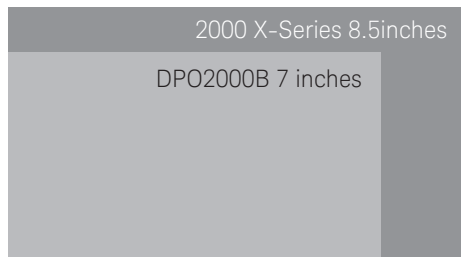
8.5-inch WVGA display offers 50% more the viewing area and > 3x the resolution

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 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
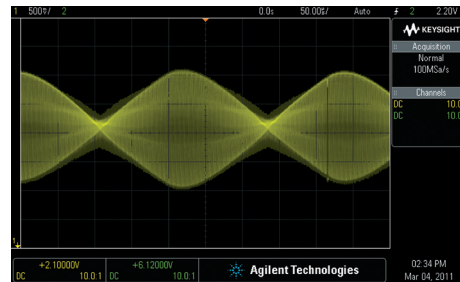
Get more

Investment protection and productivity:

- Upgradable bandwidth
- Upgradable MSO
- Upgradable memory
- Upgradable WaveGen 20 MHz built-in function generator
- Upgradable digital voltmeter
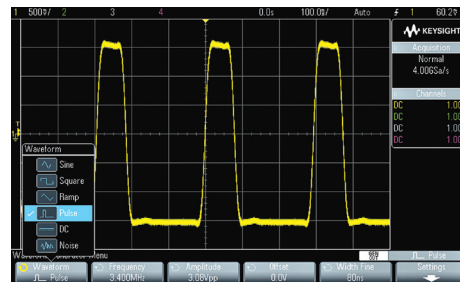- Optional measurement applications

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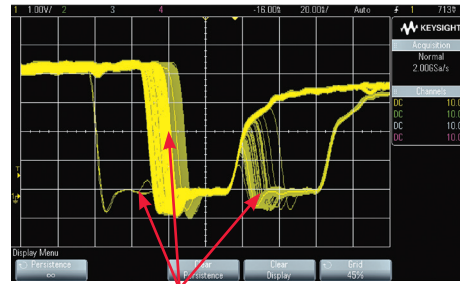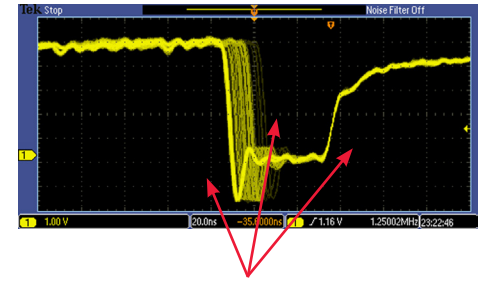

Infrequent glitch and signal jitter captured after 2 seconds on 2000 X-Series with > 50,000 wfms/s
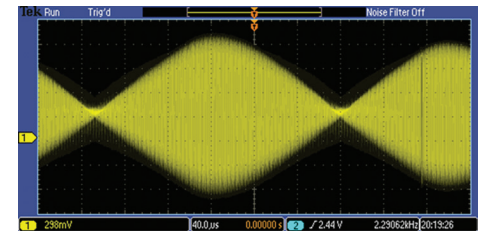

DPO2000B after 40 seconds—it never sees the glitches and shows limited signal jitter due to its slower update rate

2000 X-Series offers 64 levels of intensity showing significantly more signal detail compared to the DPO2000

DPO2000B only shows 2 levels of intensity grading and minimal signal detail

2000 X-Series' exclusive integrated 20 MHz function generator saves money and space
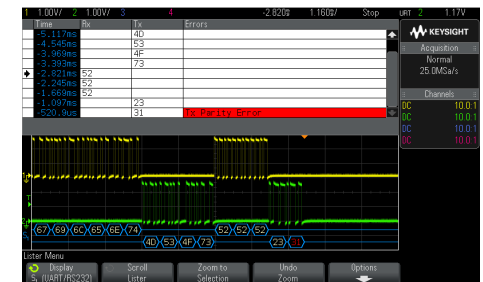
2000 X-Series' hardware-based serial decode provides the industry's fastest update rate while decoding serial busses

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