## 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, deeper memory and standard 5-year warranty.


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 | $70 \mathrm{MHz}, 100 \mathrm{MHz}, 200 \mathrm{MHz}$ | $\checkmark$ | $70 \mathrm{MHz}, 100 \mathrm{MHz}, 200 \mathrm{MHz}$ | $\checkmark$ |
| Upgradable bandwidth | Yes | $\checkmark$ | No | X |
| Maximum sampling rate | Up to $2 \mathrm{GSa} / \mathrm{s}$ (2X more) | $\checkmark$ | Up to 1 GSa/s | X |
| Memory depth | Up to 1 Mpt | $\checkmark$ | Up to 1 Mpt | $\checkmark$ |
| Display | 8.5-inch WVGA ( $800 \times 480$ ) (> $47 \%$ viewing area and 3.4 X more resolution) | $\checkmark$ | 7-inch WQVGA (480 $\times 234$ ) | X |
| Function generator | Yes - integrated | $\checkmark$ | No | X |
| Mixed signal oscilloscope | Yes - 8 channels | X | Yes - 16 channels ( 2 X more) | $\checkmark$ |
| Upgradable MSO | Yes | $\checkmark$ | No | X |
| Update rate | > 50,000 wfms/s (10X more) | $\checkmark$ | Up to 5,000 wfms/s | X |
| Segmented memory | Yes | $\checkmark$ | No | X |
| Hardware-based mask test | Yes - up to 50,000/sec | $\checkmark$ | No | X |
| Serial support | I2C, SPI, RS232, CAN, LIN | $\checkmark$ | I2C, SPI, RS232, CAN, LIN | $\checkmark$ |
| Hardware serial decode | Yes | $\checkmark$ | No | X |
| Hardware serial decode | 5 years ${ }^{1}$ | $\checkmark$ | 5 years | $\checkmark$ |

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

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

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


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


2000 X-Series' exclusive integrated 20 MHz function generator saves money and space


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


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


2000 X-Series' hardware-based serial decode provides the industry's fastest update rate while decoding serial busses

