# Keysight InfiniiVision X-Series Oscilloscopes

InfiniiVision oscilloscopes are available in a variety of price and performance points from 70 MHz to 1.5 GHz. They come with either a large 8.5-inch non-touch display or the industry's largest 12.1-inch capacitive touch screen. All InfiniiVision oscilloscopes feature the industry's fastest waveform update rates enabled by MegaZoom custom ASIC technology, so you can see everything in your signals. Industry-exclusive hardware InfiniiScan Zone touch triggering in the 4000 X-Series provides the easiest way to trigger the oscilloscope on anything it is capturing. All InfiniiVision X-Series oscilloscopes are fully upgradable, including bandwidth, to allow your oscilloscope to flex as your performance needs and budget change, giving you full investment protection.







#### 2000 X-Series

- 70 to 200 MHz bandwidth, both DSO and MSO models
- 8.5-inch display offers a 50% larger the viewing area and 4x the resolution of competitive scopes
- Hardware-based measurement applications including mask test and serial decode (optional)
- First economy-class scopes with mixed signal capability
- 100 kpts memory standard, 1 Mpt optional, segmented memory optional
- 20 MHz built-in WaveGen function generator with modulation (optional)
- Only integrated 3-digit voltmeter (optional)
- Up to 50,000 waveform updates/second
- Fully upgradable bandwidth, WaveGen, digital voltmeter, memory, serial protocol decode, MSO and measurement applications



#### 3000 X-Series

- 100 to 1 GHz bandwidth, both DSO and MSO models
- 8.5-inch display offers best-in-class signal viewing
- Hardware-based measurement applications including mask test and serial decode (optional)
- 2 Mpts memory standard, 4 Mpts optional, segmented memory optional
- 20 MHz built-in WaveGen function/arbitrary waveform generator with modulation (optional)
- Only integrated 3-digit voltmeter (optional)
- Up to 1,000,000 waveform updates/second
- Fully upgradable bandwidth, WaveGen, digital voltmeter, memory, serial protocol decode, MSO and measurement applications



## 4000 X-Series

- 200 MHz to 1.5 GHz bandwidth, both DSO and MSO models
- 12.1-inch capacitive touch screen is 35% larger than other oscilloscopes in this class
- Industry-exclusive InfiniiScan Zone touch triggering
- Hardware-based measurement applications including mask test and serial protocol decode with USB 2.0 support (optional)
- 4 Mpts memory and segmented memory standard
- Only 20 MHz built-in dual channel WaveGen function/arbitrary waveform generator with modulation (optional)
- Only integrated 3-digit voltmeter (optional)
- Up to 1,000,000 waveform updates/sec
- Fully upgradable bandwidth, WaveGen, digital voltmeter, serial protocol decode, MSO and measurement applications



# Oscilloscope models

Model	Bandwidth	Sample rate	Memory depth	Scope channels
2000 X-Series	Danamati	oumpto rate	momory doptii	ocopo chamicto
DSO/MSOX2002A	70 MHz	2 GSa/s	100 kpts std/1 Mpt opt	2/2 + 8 digital
DSO/MSOX2004A	70 MHz	2 GSa/s	100 kpts std/1 Mpt opt	4/4 + 8 digital
DSO/MSOX2012A	100 MHz	2 GSa/s	100 kpts std/1 Mpt opt	2/2 + 8 digital
DSO/MSOX2014A	100 MHz	2 GSa/s	100 kpts std/1 Mpt opt	4/4 + 8 digital
DSO/MSOX2022A	200 MHz	2 GSa/s	100 kpts std/1 Mpt opt	2/2 + 8 digital
DSO/MSOX2024A	200 MHz	2 GSa/s	100 kpts std/1 Mpt opt	4/4 + 8 digital
3000 X-Series				
DSO/MSOX3012A	100 MHz	4 GSa/s	2 Mpts std/4 Mpts opt	2/2 + 16 digital
DSO/MSOX3014A	100 MHz	4 GSa/s	2 Mpts std/4 Mpts opt	4/4 + 16 digital
DSO/MSOX3024A	200 MHz	4 GSa/s	2 Mpts std/4 Mpts opt	4/4 + 16 digital
DSO/MSOX3032A	350 MHz	4 GSa/s	2 Mpts std/4 Mpts opt	2/2 + 16 digital
DSO/MSOX3034A	350 MHz	4 GSa/s	2 Mpts std/4 Mpts opt	4/4 + 16 digital
DSO/MSOX3052A	500 MHz	4 GSa/s	2 Mpts std/4 Mpts opt	2/2 + 16 digital
DSO/MSOX3054A	500 MHz	4 GSa/s	2 Mpts std/4 Mpts opt	4/4 + 16 digital
DSO/MSOX3102A	1 GHz	5 GSa/s	2 Mpts std/4 Mpts opt	2/2 +16 digital
DSO/MSOX3104A	1 GHz	5 GSa/s	2 Mpts std/4 Mpts opt	4/4 +16 digital
4000 X-Series				
DSO/MSOX4022A	200 MHz	5 GSa/s	4 Mpts	2/2 + 16 digital
DSO/MSOX4024A	200 MHz	5 GSa/s	4 Mpts	4/4 + 16 digital
DSO/MSOX4032A	350 MHz	5 GSa/s	4 Mpts	2/2 + 16 digital
DSO/MSOX4034A	350 MHz	5 GSa/s	4 Mpts	4/4 + 16 digital
DSO/MSOX4052A	500 MHz	5 GSa/s	4 Mpts	2/2 + 16 digital
DSO/MSOX4054A	500 MHz	5 GSa/s	4 Mpts	4/4 + 16 digital
DSO/MSOX4104A	1 GHz	5 GSa/s	4 Mpts	4/4 + 16 digital
DSO/MSOX4154A	1.5 GHz	5 GSa/s	4 Mpts	4/4 + 16 digital

#### Three-Year Warranty

#### www.keysight.com/find/ThreeYearWarranty



Keysight's commitment to superior product quality and lower total cost of ownership. The only test and measurement company with three-year warranty standard on all instruments, worldwide.

#### Keysight Assurance Plans

### www.keysight.com/find/AssurancePlans



Up to five years of protection and no budgetary surprises to ensure your instruments are operating to specification so you can rely on accurate measurements.

# **Applications**

Description	2000 X-Series	3000 X-Series	4000 X-Series
Mask/waveform limit testing	DS0X2MASK	DS0X3MASK	DS0X4MASK
Segmented memory	DS0X2SGM	DS0X3SGM	Standard
WaveGen function generator	DSOX2WAVEGEN (1 ch)	-	_
WaveGen arbitrary/function generator	-	DSOX3WAVEGEN (1 ch)	DSOX4WAVEGEN2 (2 ch)
Integrated digital voltmeter	DSOXDVM	DSOXDVM	DSOXDVM
Education training kit	DSOXEDK	DSOXEDK	DSOXEDK
DSO to MSO upgrade kit	DS0X2MS0	DSOX3MSO/ DSOXPERFMSO <sup>1</sup>	DSOXPERFMSO
USB 2.0 low-/full-speed trigger and decode	=	-	DS0X4USBFL
USB 2.0 high trigger and decode	_	-	DSOX4USBH <sup>2</sup>
I <sup>2</sup> C/SPI trigger and decode	DS0X2EMBD	DS0X3EMBD	DSOX4EMBD
RS232/UART trigger and decode	DS0X2COMP	DS0X3C0MP	DS0X4C0MP
CAN/LIN trigger and decode	DS0X2AUT0	DS0X3AUT0	DS0X4AUT0
I <sup>2</sup> S trigger and decode	=	DS0X3AUDI0	DS0X4AUDI0
MIL-STD 1553/ARINC 429 trigger and decode	=	DSOX3AERO	DSOX4AERO
FlexRay trigger and decode	=	DS0X3FLEX	DSOX4FLEX
Advanced math	_	DS0X3ADVMATH	Standard
HDTV video analysis	_	DS0X3VID	DS0X4VID
Power measurement and analysis	-	DS0X3PWR	DS0X4PWR
Xilinx FPGA dynamic probe	-	-	DS0X4FPGAX
InfiniiView PC-based scope analysis software	N8900A	N8900A	N8900A
Keysight spectrum visualizer PC-based software	64997A	64997A	64997A

- 1. Order DSOX3MSO for ≤ 500 MHz models. Order DSOXPERFMSO for 1 GHz models.
- 2. DSOXUSBH is only available for 1 GHz and 1.5 GHz models.

