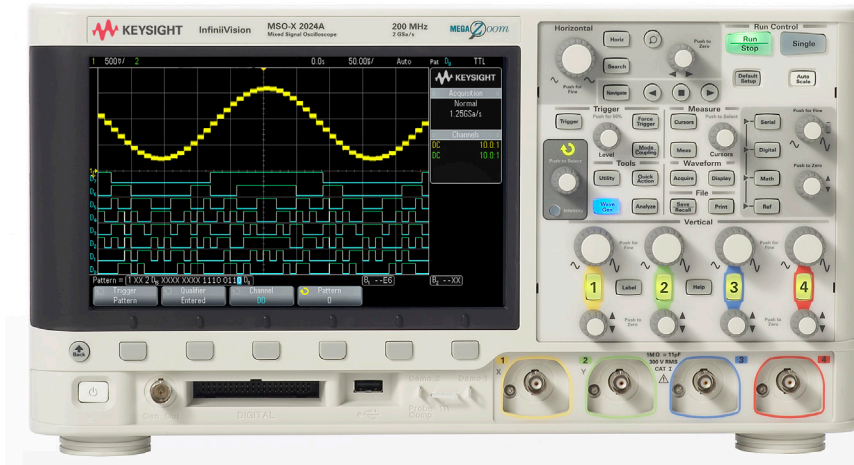


# InfiniiVision 2000 X-Series

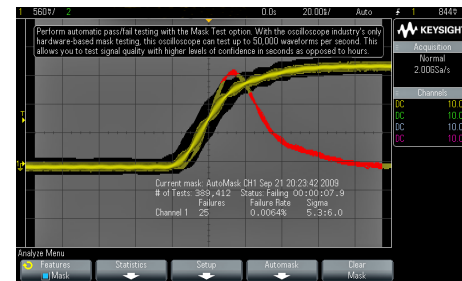
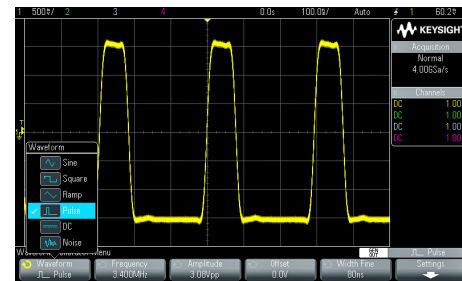
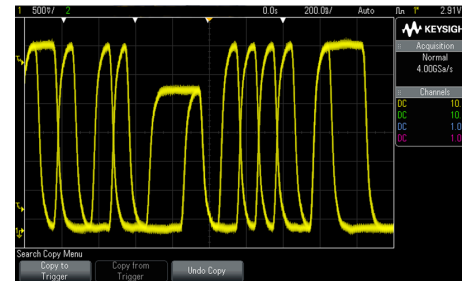
## Oscilloscopes redefined

Breakthrough technology delivers more scope for the same budget



### Key specifications

Bandwidth	70 MHz, 100 MHz, 200 MHz
Channels	2 or 4 analog channels (DSO) +8 digital channels (MSO)
Sample rate	Up to 2 GSa/s
Memory	1 Mpt per channel
Display	8.5-inch WVGA (800 x 480)
Update rate	200,000 wfms/s
Upgradable	Bandwidth, MSO, measurement applications, and WaveGen
Calibration interval	2 year
Connectivity	USB host (one front, one back), USB device, LAN (optional), GPIB (optional)



## See more

of your signal more of the time

- High resolution 8.5-inch display
- Up to 200,000 wfms/s update rate
- Fast, responsive MegaZoom IV deep memory, 1 Mpt per channel

## Do more

with the power of 6 instruments in 1

- Best-in-class oscilloscope
- Integrated 8-channel mixed signal oscilloscope (MSO) (optional)
- Serial protocol analyzer (optional)
- Industry-exclusive WaveGen built-in function generator (optional)
- Integrated digital voltmeter
- Integrated 5-digit counter

## Get more

investment protection with the industry's only fully upgradable scope

- Upgradable bandwidth
- Upgradable MSO
- Upgradable WaveGen built-in 20 MHz function generator
- Upgradable measurement applications
- 2-year recommended calibration interval

## Oscilloscope models

Model	Bandwidth	Maximum sample rate	Maximum memory	Analog channels	Digital channels
DSO-X 2002A	70 MHz	2 GSa/s	1 Mpt per channel	2	-
MSO-X 2002A	70 MHz	2 GSa/s	1 Mpt per channel	2	8
DSO-X 2004A	70 MHz	2 GSa/s	1 Mpt per channel	4	-
MSO-X 2004A	70 MHz	2 GSa/s	1 Mpt per channel	4	8
DSO-X 2012A	100 MHz	2 GSa/s	1 Mpt per channel	2	-
MSO-X 2012A	100 MHz	2 GSa/s	1 Mpt per channel	2	8
DSO-X 2014A	100 MHz	2 GSa/s	1 Mpt per channel	4	-
MSO-X 2014A	100 MHz	2 GSa/s	1 Mpt per channel	4	8
DSO-X 2022A	200 MHz	2 GSa/s	1 Mpt per channel	2	-
MSO-X 2022A	200 MHz	2 GSa/s	1 Mpt per channel	2	8
DSO-X 2024A	200 MHz	2 GSa/s	1 Mpt per channel	4	-
MSO-X 2024A	200 MHz	2 GSa/s	1 Mpt per channel	4	8

## After-purchase options

Model	Description
Software packages	
D2000GENA	Embedded software package: I2C, SPI, and UART (RS232/422/485) serial trigger & decode, plus Mask Limit Testing
D2000AUTA	Automotive software package: CAN, LIN serial trigger & decode, plus Mask Limit Testing (CAN mask files available to download)
D2000BDLA	Ultimate bundle software package: Includes all serial protocols and measurements contained in D2000GENA and D2000AUTA.

### Hardware upgrade options

DSOX2WAVEGEN	Built-in 20 MHz WaveGen function generator upgrade (license only)
DSOX2MSO	8 digital timing channels upgrade (license + MSO logic probe delivered separately)
DSOX2BW12	Bandwidth upgrade from 70 to 100 MHz, 2-ch models (license only)
DSOX2BW14	Bandwidth upgrade from 70 to 100 MHz, 4-ch models (license only)
DSOX2BW22	Bandwidth upgrade from 100 to 200 MHz, 2-ch models (license only)
DSOX2BW24	Bandwidth upgrade from 100 to 200 MHz, 4-ch models (license only)

### Productivity tools

D9010BSEO	Infiniium offline analysis software
D9010UDAA	User-definable application (UDA) PC-based test automation software
BV0004B	BenchVue oscilloscope control and automation software (standard)

All products are licensed and customer installable.

[www.keysight.com/find/2000X-Series](http://www.keysight.com/find/2000X-Series)

## Probing options

Model	Description
N2841A	Passive probe 150 MHz 10:1 attenuation (1 per channel included 100 MHz models)
N2842A	Passive probe 300 MHz, 10:1 attenuation (1 per channel included 200 MHz models)
N2755A	8 digital channel MSO cable (1 per scope on all MSO models and on DSOX2MSO upgrades)
N2889A	Passive probe 350 MHz 10:1/1:1 switchable attenuation
10076B	Passive probe 250 MHz 100:1 attenuation
N2791A	Differential active probe 25 MHz ±700 V
N2792A	Differential active probe 200 MHz ±20 V
N2793A	Differential active probe 800 MHz ±15 V
N2891A	Differential active probe 70 MHz ±7 kV
1146A	AC/DC current probe 100 kHz 100 A
N2780B	AC/DC current probe 2 MHz 500 A (requires N2779A power supply)
N2781B	AC/DC current probe 10 MHz 150 A (requires N2779A power supply)
N2782B	AC/DC current probe 50 MHz 30 A (requires N2779A power supply)
N2783B	AC/DC current probe 100 MHz 30 A (requires N2779A power supply)
N7040A	AC current probe 23 MHz, 3 kA
N7041A	AC current probe 30 MHz, 600 A
N7042A	AC current probe 30 MHz, 300 A

## Accessories included

Standard SEC mode (Secure Environment)		
Standard probe	N2841A 150 MHz, 10:1 passive probe	Standard one per channel for 70 and 100 MHz models
	N2842A 300 MHz, 10:1 passive probe	Standard one per channel for 200 MHz models
	N2755A 8-channel logic probe and accessory kit	Standard on MSO models or with DSOX2MSO upgrade

### BenchVue oscilloscope app included

Built-in help language support for English, Japanese, simplified Chinese, traditional Chinese, Korean, German, French, Spanish, Russian, Portuguese, Italian, Polish, and Thai

### Certificate of Calibration Documentation CD

Interface language support GUI menus: English, Japanese, simplified Chinese, traditional Chinese, Korean, German, French, Spanish, Russian, Portuguese, Italian, Polish, and Thai

### Localized power cord

## Accessories

Model	Description
DSOXLAN	Module - LAN and VGA
DSOXGPIB	Module - GPIB
N6456A	Rack mount kit
N6457A	Soft carrying case and front cover
N6458A	Hard copy manual
N2747A	Front panel cover only



### Keysight Assurance Plans

[www.keysight.com/find/AssurancePlans](http://www.keysight.com/find/AssurancePlans)

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