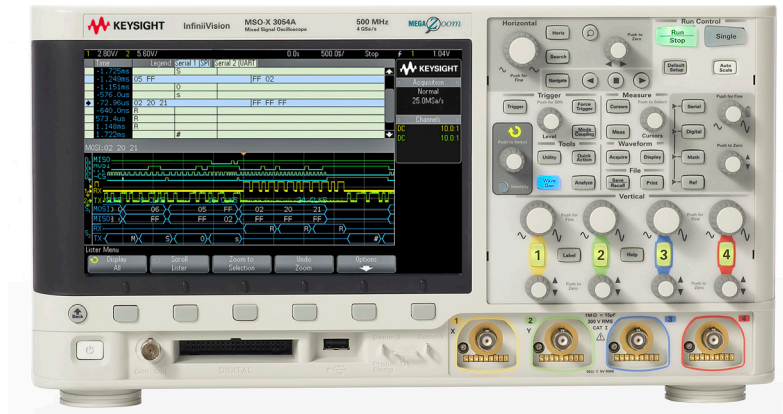


# InfiniiVision 3000A X-Series

Oscilloscopes redefined: Breakthrough technology delivers more scope for the same budget



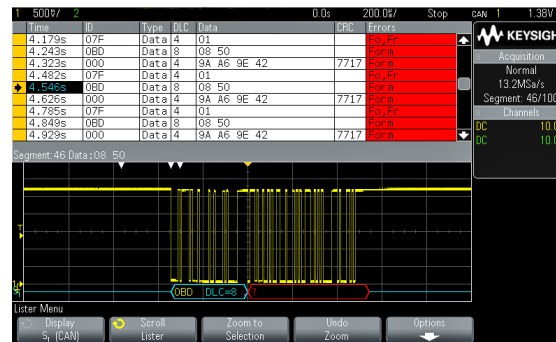
## Key specifications

Bandwidth	100 MHz, 200 MHz, 350 MHz, 500 MHz, 1 GHz
Channels	2 or 4 analog channels (DSO) +16 digital channels (MSO)
Sample rate	Up to 5 GSa/s
Memory	Up to 4 Mpts (2 Mpts standard)
Display	8.5-inch WVGA (800 x 480)
Update rate	1,000,000 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)
Secure environment	Provides compliance with NISPOM chapter 8 requirements (standard)



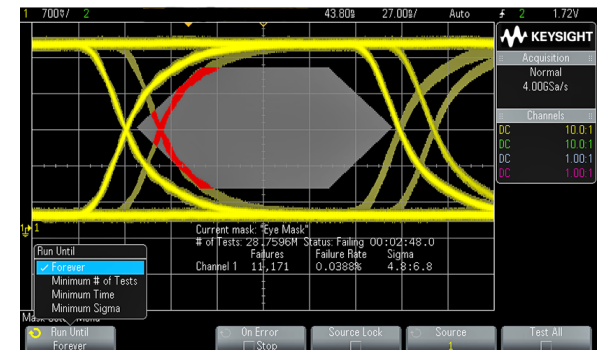
## See more of your signal more of the time

- High resolution 8.5-inch display
- Up to 1,000,000 wfms/s update rate
- Fast, responsive **MegaZoom** IV deep memory, up to 4 M



## Do more with the power of 6 instruments in 1

- Best-in-class oscilloscope
- Integrated 16 digital channel mixed signal oscilloscope (MSO) (optional)
- Serial protocol analyzer (optional)
- Industry-exclusive WaveGen built-in 20 MHz Function/Arbitrary WaveForm Generator (optional)
- Integrated digital voltmeter
- Integrated frequency counter



## Get more investment protection with the industry's only fully upgradable scope

- Upgradable bandwidth
- Upgradable to MSO
- Upgradable to WaveGen 20 MHz Function/Arbitrary Waveform Generator
- Upgradable measurement applications
- 2-year recommended calibration interval

## Oscilloscope models

Model	Bandwidth	Maximum sample rate	Maximum memory	Analog channels	Digital channels
DSOX3012A	100 MHz	4 GSa/s	4 M	2	–
MSOX3012A	100 MHz	4 GSa/s	4 M	2	16
DSOX3014A	100 MHz	4 GSa/s	4 M	4	–
MSOX3014A	100 MHz	4 GSa/s	4 M	4	16
DSOX3024A	200 MHz	4 GSa/s	4 M	4	–
MSOX3024A	200 MHz	4 GSa/s	4 M	4	16
DSOX3032A	350 MHz	4 GSa/s	4 M	2	–
MSOX3032A	350 MHz	4 GSa/s	4 M	2	16
DSOX3034A	350 MHz	4 GSa/s	4 M	4	–
MSOX3034A	350 MHz	4 GSa/s	4 M	4	16
DSOX3052A	500 MHz	4 GSa/s	4 M	2	–
MSOX3052A	500 MHz	4 GSa/s	4 M	2	16
DSOX3054A	500 MHz	4 GSa/s	4 M	4	–
MSOX3054A	500 MHz	4 GSa/s	4 M	4	16
DSOX3102A	1 GHz	5 GSa/s	4 M	2	–
MSOX3102A	1 GHz	5 GSa/s	4 M	2	16
DSOX3104A	1 GHz	5 GSa/s	4 M	4	–
MSOX3104A	1 GHz	5 GSa/s	4 M	4	16

## Accessories included

Standard SEC mode (Secure Environment), Certificate of Calibration, Documentation CD		
Standard probe	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
	N2843A passive probe 500 MHz 10:1 attenuation	1 per channel included 350/500 MHz models
	N2756A 16 digital channel MSO cable	1 per scope included on all MSO models, DSOX3MSO and DSOXPERFMSO
Built-in help language support for English, Japanese, simplified Chinese, traditional Chinese, Korean, German, French, Spanish, Russian, Portuguese and Italian		
Interface language support GUI menus: English, Japanese, simplified Chinese, traditional Chinese, Korean, German, French, Spanish, Russian, Portuguese and Italian		
Localized power cord		

## After-purchase options

Model	Description
Software packages	
D3000GENA	Embedded software package: I <sup>2</sup> C, SPI, UART (RS232/422/485), and I <sup>S</sup> serial trigger & decode, plus Mask Limit Testing, Enhanced Video Analysis, and Advanced Waveform Math.
D3000AUTA	Automotive software package: CAN, LIN, and FlexRay serial trigger & decode, plus Mask Limit Testing (CAN mask files available to download) and Advanced Waveform Math
D3000AERA	Aero software package: MIL-STD 1553 and ARINC 429 serial trigger & decode, plus Mask Limit Testing (standard mask files available to download) Enhanced Video Analysis, and Advanced Waveform Math
D3000PWRA	Power measurements & analysis software package: Power quality, current harmonics, switching loss, transient response, turn-on/off time, output ripple, efficiency, plus Mask Limit Testing and Advanced Waveform Math
D3000BDLA	Ultimate bundle software package: Includes all serial protocols and measurements contained in D3000GENA, D3000AUTA, D3000AERA, and D3000PWRA.
Hardware upgrade options	
DSOX3WAVEGEN	Built-in 20 MHz WaveGen function generator/AWG upgrade (license only)
DSOX3MSO	16 digital timing channels upgrade for ≤ 500 MHz BW models (license + MSO logic probe delivered separately)
DSOX3PERFMSO	16 digital timing channels upgrade for 1 GHz BW models (license + MSO logic probe delivered separately)
DSOX3MEMUP	Acquisition memory upgrade from 2 to 4 Mpts (license only)
DSOX3BW24	Bandwidth upgrade from 100 to 200 MHz, 4-ch models (license only)
DSOX3BW32 <sup>1</sup>	Bandwidth upgrade from 100 to 350 MHz, 2-ch models (return to Keysight service center)
DSOX3BW34 <sup>1</sup>	Bandwidth upgrade from 100 to 350 MHz, 4-ch models (return to Keysight service center)
DSOX3BW52	Bandwidth upgrade from 350 to 500 MHz, 2-ch models (license only)
DSOX3BW54	Bandwidth upgrade from 350 to 500 MHz, 4-ch models (license only)
DSOX3BW12 <sup>1</sup>	Bandwidth upgrade from 500 MHz to 1 GHz, 2-ch models (return to Keysight service center)
DSOX3BW14 <sup>1</sup>	Bandwidth upgrade from 500 MHz to 1 GHz, 4-ch models (return to Keysight service center)
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)

1. Requires return to Keysight Service Center. All other products are licensed and customer installable.

## Probing options

For complete list of compatible probes, see Keysight document 5968-8153EN.

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)
N2843A	Passive probe 500 MHz, 10:1 attenuation (1 per channel included 350/500 MHz and 1 GHz models)
N2756A	16 digital channel MSO cable (1 per scope included MSO models, DSOX3MSO and DSOXPERFMSO upgrades)
N2889A	Passive probe 350 MHz 10:1/1:1 switchable attenuation
10076C	Passive probe 250 MHz 100:1 attenuation
N2790A	Differential active probe 100 MHz ± 1.4 kV with AutoProbe interface
N2791A	Differential active probe 25 MHz ± 700 V
N2792A	Differential active probe 200 MHz ± 20 V
N2793A	Differential active probe 800 MHz ± 15 V
1146B	AC/DC current probe 100 kHz 100 A
1147B	AC/DC current probe 50 MHz 15 A with AutoProbe interface
N2795A	Single-ended active probe 1 GHz ± 8 V with AutoProbe interface (limit 2)
N2796A	Single-ended 2 GHz active probe with the AutoProbe interface
N2893A	AC/DC current probe 100 MHz 15 A with AutoProbe interface
N2744A	T2A (Tektronix TekProbe interface to Keysight AutoProbe) probe interface adapter
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

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.

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