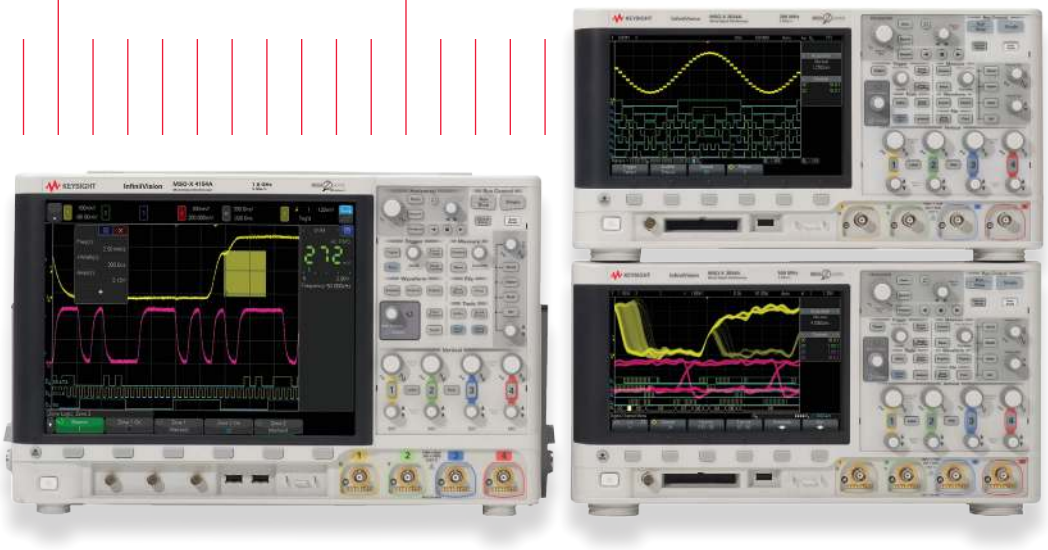
Keysight Technologies
InfiniiVision 4000 X-Series Oscilloscopes

Data Sheet



KEYSIGHT TECHNOLOGIES

InfiniiVision 4000 X-Series Oscilloscopes

The Keysight Technologies, Inc. next-generation oscilloscopes offer waveform update rates 20 times faster than any other oscilloscope in this class. With the latest capacitive touch screen technology and innovative InfiniiScan Zone touch triggering, your oscilloscope experience will be completely redefined.

Experience the speed

Find even more of your most intermittent signal anomalies

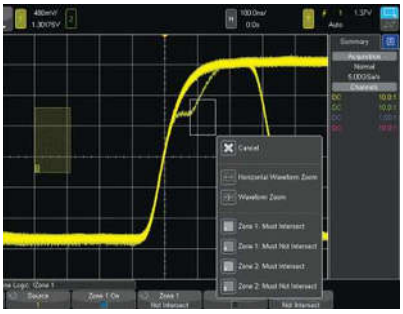
- Industry's fastest 1,000,000 waveforms/sec update rate
- Uncompromised MegaZoom IV smart memory
- Standard segmented memory



Experience the usability

Quickly debug your design with an oscilloscope designed for touch

- Industry's largest 12.1-inch display
- Industry's first capacitive touch screen
- Exclusive InfiniiScan Zone touch triggering



Experience the integration

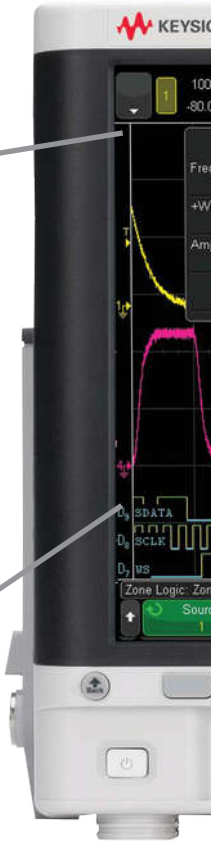
Get the power of 5 instruments in 1, fully upgradable

- Best-in-class oscilloscope
- 16 digital channels on MSO models and upgrade
- Hardware-based serial protocol analyzer (optional)
- Industry-exclusive WaveGen dual-channel function/arbitrary waveform generator (optional)
- 3-digit voltmeter (optional)



Patented MegaZoom IV smart memory gives you more confidence in your design with uncompromised responsiveness, even with MSO, serial protocol decode, math functions and measurements turned on

Industry's first capacitive touch screen dramatically speeds setup and operation for unprecedented usability in an embedded OS scope.



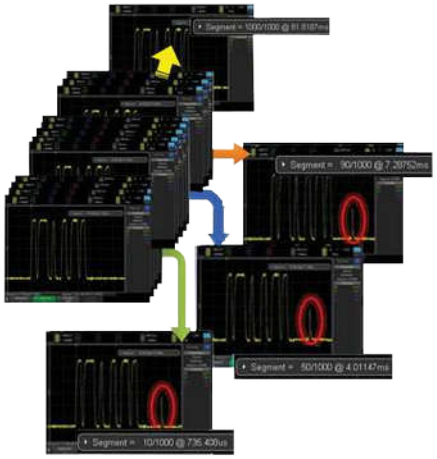
Industry's largest display of 12.1 inches gives you more visibility.

The industry-leading 1,000,000 wfms/sec update rate lets you troubleshoot problems by showing you more signal detail than any other scope in this class.

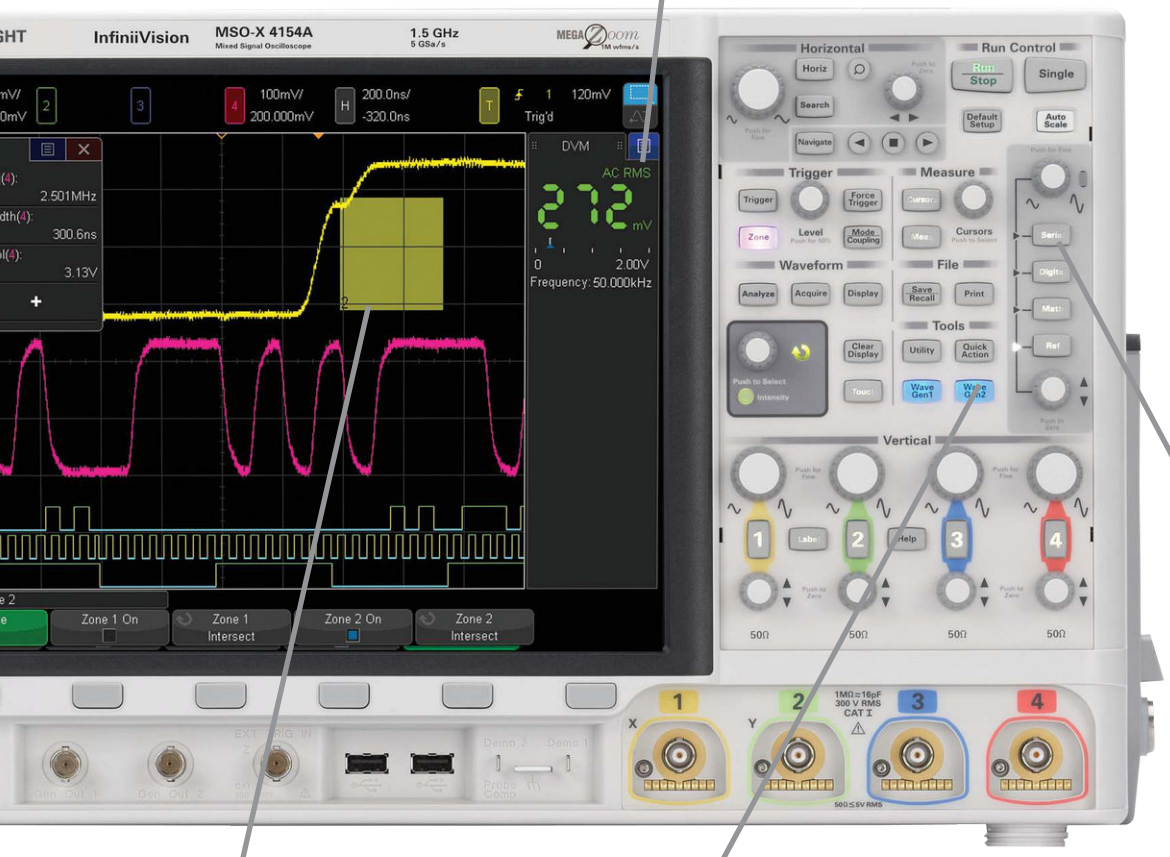


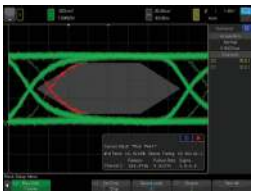
The industry's only integrated 3-digit voltmeter provides DVM capabilities via the scope probes.





Standard segmented memory intelligently utilizes the acquisition memory to capture just the signal of interest to y ou, resulting in an effective ultra-deep memory oscilloscope.

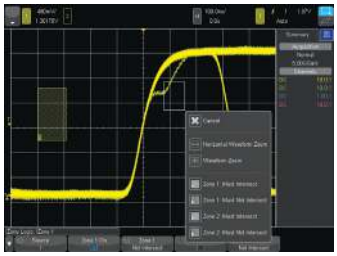




The mask testing option tests devices to your parameters at 270,000 tests per second.

Take advantage of the largest set of application solutions in the industry including serial bus triggering and decode support.

InfiniiScan Zone touch triggering accomplishes advanced triggering with ease. If you can see it, you can trigger on it by simply drawing a box on screen.



Industry's only integrated dual-channel WaveGen 20 MHz function/arbitrary waveform generator lets you simulate a variety of function and arbitrary waveforms including differential signals, clock and data signals, modulations and more in a single instrument.





InfiniiVision 4000 X-Series Oscilloscopes

4000 X-Series oscilloscopes

Model	Bandwidth	Sample Rate	Memory	Channels
DSOX4022A	200 MHz	5 GSa/s	4 Mpts	2
MSOX4022A	200 MHz	5 GSa/s	4 Mpts	2 + 16
DSOX4024A	200 MHz	5 GSa/s	4 Mpts	4
MSOX4024A	200 MHz	5 GSa/s	4 Mpts	4 + 16
DSOX4032A	350 MHz	5 GSa/s	4 Mpts	2
MSOX4032A	350 MHz	5 GSa/s	4 Mpts	2 + 16
DSOX4034A	350 MHz	5 GSa/s	4 Mpts	4
MSOX4034A	350 MHz	5 GSa/s	4 Mpts	4 + 16
DSOX4052A	500 MHz	5 GSa/s	4 Mpts	2
MSOX4052A	500 MHz	5 GSa/s	4 Mpts	2 + 16
DSOX4054A	500 MHz	5 GSa/s	4 Mpts	4
MSOX4054A	500 MHz	5 GSa/s	4 Mpts	4 + 16
DSOX4104A	1 GHz	5 GSa/s	4 Mpts	4
MSOX4104A	1 GHz	5 GSa/s	4 Mpts	4 + 16
DSOX4154A	1.5 GHz	5 GSa/s	4 Mpts	4
MSOX4154A	1.5 GHz	5 GSa/s	4 Mpts	4 + 16

Applications

Model	Description
DSOX4EMBD	Embedded serial triggering and analysis (I^2C, SPI)
DSOX4COMP	Computer serial triggering and analysis (RS232/UART)
DSOX4USBFL	USB 2.0 full/low speed serial decode and triggering
DSOX4USBH *	USB 2.0 hi-speed serial decode and triggering
DSOX4AUTO	Automotive serial triggering and analysis (CAN/LIN)
DSOX4FLEX	FlexRay serial triggering and analysis
DSOX4AUDIO	Audio serial triggering and analysis (I^2S)
DSOX4AERO	Aerospace and defense serial triggering and decode (MIL-STD 1553 and ARINC 429)
DSOX4WAVEGEN2	Dual-channel WaveGen 20 MHz arbitrary/function generator
DSOXDVM	3-digit voltmeter (DVM)
DSOX4PWR	Power analysis application
DSOX4MASK	Mask limit testing
DSOX4VID	Enhanced video/TV application package
DSOX4FPGAX	FPGA dynamic probe option for Xilinx
DSOXEDK	Education and training kit
N8900A	InfiniiView oscilloscope analysis software
64997A	Keysight spectrum visualizer (ASV)
89601B	Vector signal analyzer software (version 15 and higher)
33503A	BenchLink waveform builder pro and basic

* Only available for 1 GHz or 1.5 GHz models.

For more information please visit:
www.kesight.com/find/4000X-Series

Upgrades

Model	Description
DSOX4B2T32U	Service center bandwidth upgrade from 200 to 350 MHz, 2 ch
DSOX4B2T34U	Service center bandwidth upgrade from 200 to 350 MHz, 4 ch
DSOX4B2T52U	Licensed bandwidth upgrade from 350 to 500 MHz, 2 ch
DSOX4B2T54U	Licensed bandwidth upgrade from 350 to 500 MHz, 4 ch
DSOX4B5T104U	Service center bandwidth upgrade from 500 MHz to 1 GHz, 4 ch
DSOX4B1T154U	Service center bandwidth upgrade from 1 GHz to 1.5 GHz, 4 ch
DSOX4B2T52U	Service center bandwidth upgrade from 200 to 500 MHz, 2 ch
DSOX4B2T54U	Service center bandwidth upgrade from 200 to 500 MHz, 4 ch
DSOX4B2T104U	Service center bandwidth upgrade from 200 to 1 GHz,, 4 ch
DSOX4B2T154U	Service center bandwidth upgrade from 200 to 1.5 GHz,, 4 ch
DSOX4B3T104U	Service center bandwidth upgrade from 350 to 1 GHz, 4 ch
DSOX4B3T154U	Service center bandwidth upgrade from 350 to 1.5 GHz, 4 ch
DSOX4B5T154U	Service center bandwidth upgrade from 500 to 1.5 GHz, 4 ch
DSOXPERFMSO	DSO to MSO upgrade

Probes

Model	Description
N2894A	Passive probe 700 MHz, 10:1, 10 MΩ (included standard. 1 per scope channel)
N6450-60001	16 digital channel MSO cable (included on MSOX & DSOXPERFMSO)
10076B	High-voltage passive probe (250 MHz, 4 kV)
N2795A	1 GHz / 1 pF / 1 MΩ active single-ended probe with AutoProbe
N2796A	2 GHz / 1 pF / 1 MΩ active single-ended probe with AutoProbe
N2750A	InfiniiMode 1.5 GHz differential probe with AutoProbe
N2790A	Differential active probe 100 MHz, ±1.4 kV with AutoProbe
N2791A	Differential active probe 25 MHz, ±700 V
N2792A	Differential active probe 200 MHz, ±20V
N2793A	Differential active probe 800 MHz, ±15V
1147B	AC/DC Current probe 50 MHz 15 A with AutoProbe
N2893A	AC/DC current probe 100 MHz 15 A with AutoProbe

For a complete list of compatible probes, visit
www.kesight.com/find/scope_probes.

Model	Description
N4865A	GPIB-to-LAN external adapter
N2763A	Rackmount kit
N2733A	Soft carrying case
N6455A	Hard copy manual

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