

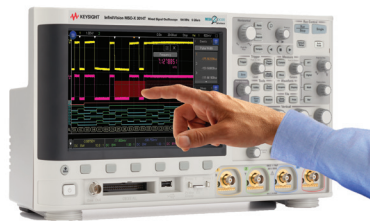
InfiniiVision 3000T X-Series Oscilloscopes



Touch
Discover
Solve

Key features

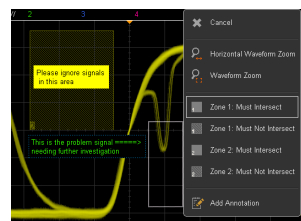
Features	Descriptions
Bandwidth	100, 200, 350, 500 MHz, 1 GHz
Channels	2 or 4 analog channels (DSO) + 16 digital channels (MSO)
Max sample rate	5 GSa/s
Max memory	4 Mpts
Display	8.5 inch capacitive touch display
Wfm update rate	> 1,000,000 waveforms per second
Trigger	InfiniiScan Zone touch trigger + standard trigger modes
Advanced math	Standard, display 1 function and FFT simultaneously
Connectivity	USB2.0 (mouse and keyboard support), optional LAN, video, GPIB
Upgradability	Bandwidth, MSO, WaveGen, serial protocol trigger and decode, and other applications
Analysis	Segmented memory, search/navigate, advanced math functions, limit/mask test (option), gated FFT, frequency response analysis (Bode plots)
Serial protocol options	I ² C, SPI, UART, CAN, CAN-FD, CAN symbolic, SENT, LIN, FlexRay, I ² S, MIL-STD1553, ARINC429



Touch

Increase productivity with capacitive touch screen technology

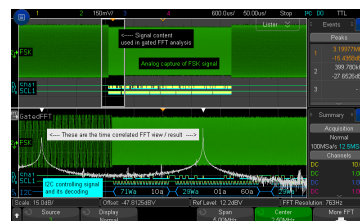
- 8.5-inch capacitive touch screen with gesture support
- Four on-screen annotations and a touch interface simplifies documentation
- Reconfigurable side bar provides full customization



Discover

Identify anomalies with the fast waveform update, then isolate with zone trigger

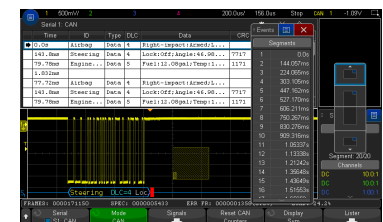
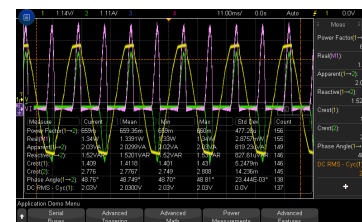
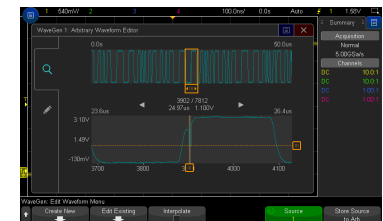
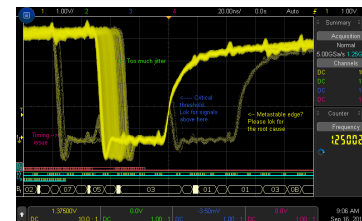
- Uncompromised > 1,000,000 wfms/sec update rate, even with digital channels, measurements, functions, or serial decoding on
- Hardware-based zone touch trigger with two-zone support
- Standard segmented memory and advanced math



Solve

Find the root cause and solve your analog, digital, and frequency domain problems

- 7-in-1 oscilloscope with integrated 16 digital channels, protocol analysis, arbitrary/function generator, 3-digit DVM, 8-digit counter/totalizer and frequency response analyzer (Bode plots)
- Time/frequency domain correlation measurements with gated FFT and peak search
- BenchVue next-generation remote connectivity solution and Infiniium Offline scope data analysis tool



Key specifications

InfiniiVision 3000T X-Series oscilloscope models											
	3012T	3014T	3022T	3024T	3032T	3034T	3052T	3054T	3102T	3104T	
Bandwidth * (-3 dB)	100 MHz		200 MHz		350 MHz		500 MHz		1 GHz		
Input channels	DSOX	2	4	2	4	2	4	2	4	2	4
	MSOX	2 + 16	4 + 16	2 + 16	4 + 16	2 + 16	4 + 16	2 + 16	4 + 16	2 + 16	4 + 16
Sampling rate	5 GSa/s half channel, 2.5 GSa/s all channel										
Memory depth	Standard 4 Mpts, standard segment memory										
Display size and type	8.5-inch capacitive touch display with standard zone trigger										
Waveform update rate	> 1,000,000 waveforms per second										
Integrations (7-in-1) (options)	Oscilloscope, logic analysis, protocol analysis, 20 MHz arbitrary/function generator, 3 digit DVM, 8 digit counter and frequency response analyzer (bode plots)										

Model number	Recommended probes and accessories	Standard/Optional
Probes		
N2843A	Passive probe 500 MHz, 10:1	Standard (1 per channel)
N2756A	16 digital channel MSO cable	Standard on MSOX models and DSOX6MSO
N2870A	Passive probe 35 MHz, 1:1, 1 MΩ	Optional
10076B	Passive probe 250 MHz 100:1 attenuation (4 kV)	Optional
N2795A	Active single-ended probe 1 GHz 1 pF 1 MΩ with AutoProbe	Optional
N2797A	Active single-ended probe 1.5 GHz extreme temperature	Optional
N2750A	InfiniiMode differential probe 1.5 GHz 700 fF 200 kΩ with AutoProbe	Optional
N2790A	Differential active probe 100 MHz, ± 1.4 kV with auto probe	Optional
N2791A	Differential active probe 250 MHz, ± 700 V	Optional
N2818A	200 MHz 10:1 Differential Probe with AutoProbe	Optional
N2819A	800 MHz 10:1 Differential Probe with AutoProbe	Optional
1147B	AC/DC Current probe 50 MHz 15 A with auto probe	Optional
N2893A	AC/DC current probe 100 MHz 15 A with auto probe	Optional
N2820A	2-channel high-sensitivity current probe 50 μA to 5 A	Optional
N7040A	23 MHz, 3 kA, AC current probe	Optional
N7041A	30 MHz, 600 A, AC current probe	Optional
N7042A	30 MHz, 300 A, AC current probe	Optional
N7026A	150 MHz, 40 Apk, AC/DC high-sensitivity current probe, AutoProbe	Optional
Accessories		
DSOXLAN	LAN/VGA connection module	Optional
DSOXGPIB	GPIB connection module	Optional
N2747A	Front panel cover	Optional
N6456A	Rack mount kit	Optional
N6457A	Soft carrying case with front panel cover	Optional



Keysight Assurance Plans

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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.

Model number **Option description**

Hardware upgrade options	
DSOXWAVEGEN	WaveGen: 20 MHz function generator/AWG
DSOXT3MSO	16-channel MSO upgrade (logic cable/probe included)

Software package options

D3000GENA	Embedded software package: I²C, SPI, UART (RS232/422/485), I²S, and USB PD serial trigger & decode, plus Mask Limit Testing, Frequency Response Analysis (Bode plots), and Enhanced Video Analysis
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D3000AUTA	Automotive software package: CAN (symbolic with .dbc file), CAN FD (symbolic with .dbc file), LIN (symbolic with .ldf file), FlexRay, SENT, CXP, PSIS (user-definable Manchester), and User-definable NRZ serial trigger & decode, plus Mask Limit Testing (CAN/CAN FD mask files available to download) and Frequency Response Analysis (Bode plots)
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D3000AERA	Aero software package: MIL-STD 1553 and ARINC 429 serial trigger & decode, plus Mask Limit Testing (standard mask files available to download), Frequency Response Analysis (Bode plots), and Enhanced Video Analysis
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D3000PWRA	Power measurements & analysis software package: Power quality, current harmonics, switching loss, transient response, turn-on/off time, output ripple, efficiency, loop response, PSRR, etc., plus Mask Limit Testing and Frequency Response Analysis (Bode plots), and USB PD serial trigger & decode
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D3000NFCA	NFC software package: NFC trigger and PC-based automated test software
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D3000BDLA	Ultimate bundle software package: Includes all serial protocols and measurements contained in D3000GENA, D3000AUTA, D3000AERA, D3000PWRA, and D3000NFCA.
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Bandwidth upgrade

DSOXT3B1T22U	License only 100 MHz to 200 MHz upgrade, 2 ch
DSOXT3B1T32U	Service center 100 MHz to 350 MHz upgrade, 2 ch
DSOXT3B1T52U	Service center 100 MHz to 500 MHz upgrade, 2 ch
DSOXT3B1T102U	Service center 100 MHz to 1 GHz upgrade, 2 ch
DSOXT3B1T24U	License only 100 MHz to 200 MHz upgrade, 4 ch
DSOXT3B1T34U	Service center 100 MHz to 350 MHz upgrade, 4 ch
DSOXT3B1T54U	Service center 100 MHz to 500 MHz upgrade, 4 ch
DSOXT3B1T104U	Service center 100 MHz to 1 GHz upgrade, 4 ch
DSOXT3B2T32U	Service center 200 MHz to 350 MHz upgrade, 2 ch
DSOXT3B2T52U	Service center 200 MHz to 500 MHz upgrade, 2 ch
DSOXT3B2T102U	Service center 200 MHz to 1 GHz upgrade, 2 ch
DSOXT3B2T34U	Service center 200 MHz to 350 MHz upgrade, 4 ch
DSOXT3B2T54U	Service center 200 MHz to 500 MHz upgrade, 4 ch
DSOXT3B2T104U	Service center 200 MHz to 1 GHz upgrade, 4 ch
DSOXT3B3T52U	License only 350 MHz to 500 MHz upgrade, 2 ch
DSOXT3B3T102U	Service center 350 MHz to 1 GHz upgrade, 2 ch
DSOXT3B3T54U	License only 350 MHz to 500 MHz upgrade, 4 ch
DSOXT3B3T104U	Service center 350 MHz to 1 GHz upgrade, 4 ch
DSOXT3B5T102U	Service center 500 MHz to 1 GHz upgrade, 2 ch
DSOXT3B5T104U	Service center 500 MHz to 1 GHz upgrade, 4 ch
DSOXT3MSO	MSO upgrade

Productivity tools

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

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