

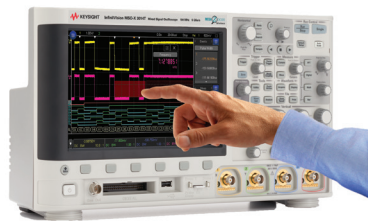
InfiniiVision 3000T X-Series Oscilloscopes



Touch
Discover
Solve

Key features

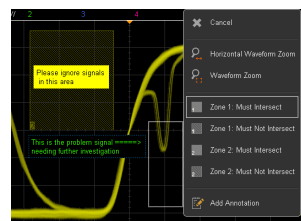
Features	Descriptions
Bandwidth	100, 200, 350, 500 MHz, 1 GHz
Channels	2 or 4 analog channels (DSO) + 16 digital channels (MSO)
Max sample rate	5 GSa/s
Max memory	4 Mpts
Display	8.5 inch capacitive touch display
Wfm update rate	> 1,000,000 waveforms per second
Trigger	InfiniiScan Zone touch trigger + 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

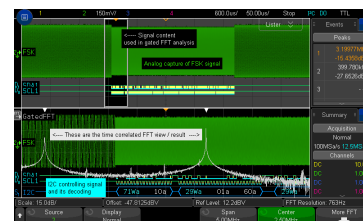
- 8.5-inch capacitive touch screen with gesture support
- Four on-screen annotations and a touch interface simplifies documentation
- Reconfigurable side bar provides full customization



Discover

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

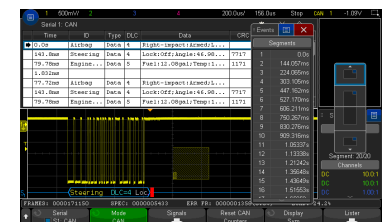
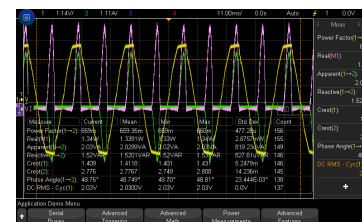
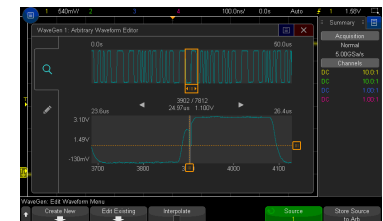
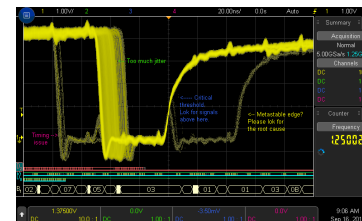
- Uncompromised > 1,000,000 wfms/sec update rate, even with digital channels, measurements, functions, or serial decoding on
- Hardware-based zone touch trigger with two-zone support
- Standard segmented memory and advanced math



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
	MSEX	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



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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: I ² C, SPI, UART (RS232/422/485), I ² S, and USB PD serial trigger & decode, plus Mask Limit Testing, Frequency Response Analysis (Bode plots), and Enhanced Video Analysis
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)
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
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
D3000NFCA	NFC software package: NFC trigger and PC-based automated test software
D3000BDLA	Ultimate bundle software package: Includes all serial protocols and measurements contained in D3000GENA, D3000AUTA, D3000AERA, D3000PWRA, and D3000NFCA.
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