

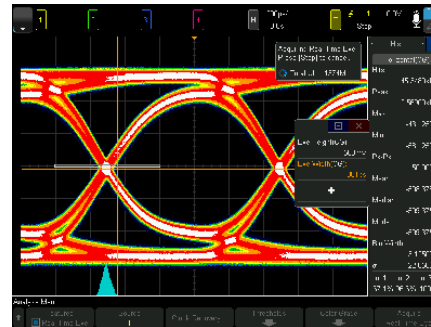
# Keysight InfiniiVision 6000 X-Series Oscilloscope

## New price performance standard



### Key specifications

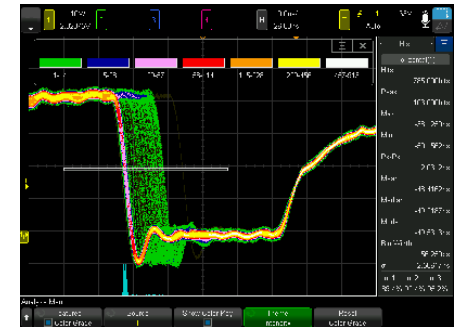
Product	Description
Bandwidth	1, 2.5, 4, 6 GHz
Channels	2 or 4 analog channels (DSO) +16 digital channels (MSO)
Max sample rate	20 GSa/s
Max memory	4 Mpts
Display	12.1-inch capacitive multi-touch display
Waveform update rate	> 450,000 waveforms per second
Trigger	InfiniiScan Zone touch trigger + standard advanced triggers
Advanced math	Standard, display four functions simultaneously
Connectivity	Standard USB 2.0, LAN, video (GPIB option), USB mouse, keyboard, and microphone support
Upgradable (option)	Bandwidth, MSO, dual-channel WaveGen, serial protocol trigger and decode, DVM, 10-digit counter, and other measurement applications
Analysis	Histogram, color grade, jitter/real-time eye diagram (option), enhanced FFT, segmented memory, search/navigate, advanced math functions, limit/mask test (option)
Serial protocol options	I <sup>2</sup> C/SPI, RS232/UART, CAN/LIN, FlexRay, I <sup>2</sup> S, MIL-STD1553, ARINC429, USB 2.0
Voice control	Standard



### New bandwidth standard

Performance meets price: two opposing concepts meet in a portable 6-GHz oscilloscope.

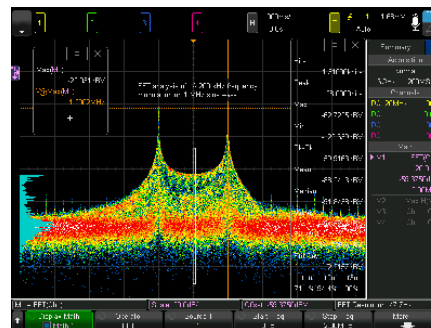
- Surprisingly low starting prices
- 210 uVrms noise floor at 1 mV/div (6 GHz)
- 115 uVrms noise floor at 1 mV/div (1 GHz)
- Standard hardware bandwidth limit control
- Only 6" (15 cm) deep, 15 lbs (6.8 kg)



### New visualization standard

Quickly troubleshoot your design by visualizing your challenges.

- > 450,000 wfms/sec update rate
- Hardware InfiniiScan Zone touch trigger
- 12.1-inch capacitive multi-touch screen
- Standard histogram and color grade
- Optional jitter and real-time eye diagram analysis



### New integration standard

Get the power of 6 instruments in 1, fully upgradable.

- Best-in-class oscilloscope
- Integrated 16 digital channels on MSO models
- Serial protocol trigger and decode (option)
- Integrated dual-channel function/arbitrary waveform generator (option)
- Integrated 3-digit digital voltmeter (option)
- Integrated 10-digit counter and totalizer (option)

Also with multi-language voice control and enhanced color FFT with peak search.

## InfiniiVision 6000 X-Series oscilloscope models

Half-channel real-time bandwidth (-3 db)	1 GHz	2.5 GHz	4 GHz	6 GHz	
Full-channel real-time bandwidth (-3 db)	1 GHz	2.5 GHz	4 GHz	4 GHz	
Input channels	DSOX6002A	2			
	DSOX6004A	4			
	MSOX6002A	2 + 16			
	MSOX6004A	4 + 16			
Bandwidth options		1 GHz	2.5 GHz	4 GHz	6 GHz
	For 2-channel models	Default	DSOX6B10T252BW	DSOX6B10T402BW	DSOX6B10T602BW
For 4-channel models	Default	DSOX6B10T254BW	DSOX6B10T404BW	DSOX6B10T604BW	
Sampling rate	20 GSa/s half channel, 10 GSa/s all channel				
Memory	≤ 2 GSa/s: 4 Mpts half, 2 Mpts all channels, > 2 GSa/s: 1 Mpts half, 500 kpts all channels				

- For example, if you want a 4 GHz, 4 + 16 channel 6000 X-Series, the model config will be MSOX6004A and DSOX6B10T404BW.

## Recommended probes and accessories

Model	Recommended probes and accessories	Standard/optional
N2894A	Passive probe 700 MHz, 10:1, 9.5 pF, 10 MΩ	Included standard (1 per channel)
N2756A	16 digital channel MSO cable	Included standard on MSOX models and DSOX6MSO
N2870A	Passive probe 35 MHz, 1:1, 1 MΩ	Optional
10076B	High-voltage passive probe (4 kV)	Optional
N2795A	Active single-ended probe 1 GHz, 1 pF, 1 MΩ with AutoProbe	Optional
N2796A	Active single-ended probe 2 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
N2751A	InfiniiMode differential probe 3.5 GHz, 700 fF, 200 kΩ with AutoProbe	Optional
N2752A	InfiniiMode differential probe 6.0 GHz, 700 fF, 200 kΩ with AutoProbe	Optional
1130A	InfiniiMax differential probe 1.5 GHz, 270 fF, 50 kΩ with AutoProbe	Optional
1131A	InfiniiMax differential probe 3.5 GHz, 270 fF, 50 kΩ with AutoProbe	Optional
1132A	InfiniiMax differential probe 5 GHz, 270 fF, 50 kΩ with AutoProbe	Optional
1134A	InfiniiMax differential probe 7 GHz, 270 fF, 50 kΩ with AutoProbe	Optional
N2790A	Differential active probe 100 MHz, ± 1.4 kV, 8 MΩ with AutoProbe	Optional
N2791A	Differential active probe 25 MHz, ± 700 V, 8 MΩ	Optional
N2818A	200 MHz 10:1 differential probe 1 MΩ with AutoProbe	Optional
N2819A	800 MHz 10:1 differential probe 200 kΩ with AutoProbe	Optional
1147B	AC/DC current probe 50 MHz, 15 A with AutoProbe	Optional
N2893A	AC/DC current probe 100 MHz, 15 A with AutoProbe	Optional
N2820A	2-channel high-sensitivity current probe 50 uA to 5 A	Optional
N2821A	1-channel high-sensitivity current probe 50 uA to 5 A	Optional



Model	Description
<b>Model number</b>	<b>Bandwidth, application, and feature upgrades</b>
Bandwidth and digital channels upgrades	
DSOX6B10T252BW	1.0 GHz to 2.5 GHz bandwidth, 2-channel model
DSOX6B10T402BW	1.0 GHz to 4.0 GHz bandwidth, 2-channel model
DSOX6B10T602BW	1.0 GHz to 6.0 GHz bandwidth, 2-channel model
DSOX6B10T254BW	1.0 GHz to 2.5 GHz bandwidth, 4-channel model
DSOX6B10T404BW	1.0 GHz to 4.0 GHz bandwidth, 4-channel model
DSOX6B10T604BW	1.0 GHz to 6.0 GHz bandwidth, 4-channel model
DSOX6B25T402BW	2.5 GHz to 4.0 GHz bandwidth, 2-channel model
DSOX6B25T602BW	2.5 GHz to 6.0 GHz bandwidth, 2-channel model
DSOX6B40T602BW	4.0 GHz to 6.0 GHz bandwidth, 2-channel model
DSOX6B25T404BW	2.5 GHz to 4.0 GHz bandwidth, 4-channel model
DSOX6B25T604BW	2.5 GHz to 6.0 GHz bandwidth, 4-channel model
DSOX6B40T604BW	4.0 GHz to 6.0 GHz bandwidth, 4-channel model
DSOX6MSO	6000 X-Series MSO
Serial protocols	
DSOX6EMBD	Embedded serial trigger and decode (I <sup>2</sup> C, SPI)
DSOX6COMP	Computer serial trigger and decode (RS232/UART)
DSOX6USBFL	USB 2.0 full-/low-speed serial trigger and decode
DSOX6USBH	USB 2.0 hi-speed serial trigger and decode
DSOX6AUTO	Automotive serial trigger and decode (CAN/LIN)
DSOX6FLEX	FlexRay serial trigger and decode
DSOX6AUDIO	Audio serial trigger and decode (I <sup>2</sup> S)
DSOX6AERO	MIL-STD 1553 and ARINC 429 serial trigger and decode
Measurement applications	
DSOX6JITTER	Jitter and real-time eye diagram analysis
DSOX6WAVEGEN2	Dual-channel WaveGen 20-MHz AWG
DSOX6VMCTR	Integrated Digital Voltmeter and 10-digit counter
DSOX6PWR	Power application
DSOX6MASK	Mask limit testing
DSOX6USBSQ	USB 2.0 signal quality test
DSOX6VID	Enhanced video/TV application package
DSOX6FPGAX	FPGA dynamic probe option for Xilinx
Productivity tools	
DSOXEDK	Education and training kit
N8900A	Infiniium offline oscilloscope decode software
34840B	BenchVue software
Model number	Recommended accessories
N4865A	GPIO connection module
N2111A	Rack mount kit
N2733B	Soft carrying case
N2112A	Hard copy manual
3A1311-2710J	Hard transit case (available from CPD Industries www.CaseCruzer.com)

### Three-Year Warranty

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

Keysight's commitment to superior product quality and lower total cost of ownership. The only test and measurement company with three-year warranty standard on all instruments, worldwide.

### Keysight Assurance Plans

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

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

