

# Oscilloscope Experience Redefined: Experience the Speed, Usability, and Integration (Continued)

## Overview of Keysight InfiniiVision X-Series oscilloscopes

InfiniiVision	6000 X-Series	4000 X-Series	3000T X-Series	2000 X-Series	1000 X-Series
Analog channels	2 or 4	2 or 4	2 or 4	2 or 4	2
Digital channels	16 (MSO models or upgrade)	16 (MSO models or upgrade)	16 (MSO models or upgrade)	8 (MSO models or upgrade)	External trigger can be used as a 3rd digital channel
Bandwidth	1, 2.5, 4, 6 GHz	200, 350, 500 MHz, 1, 1.5 GHz	100, 200, 350, 500 MHz, 1 GHz	70, 100, 200 MHz	50, 70, 100 MHz
Max sample rate	20 GSa/s	5 GSa/s	5 GSa/s	2 GSa/s	2 GSa/s
Max memory depth	4 Mpts	4 Mpts	4 Mpts	100 kpts (standard) 1 Mpts (option)	1 Mpts
Max waveform update rate	> 450,000 wfms/sec	> 1,000,000 wfms/sec	> 1,000,000 wfms/sec	> 50,000 wfms/sec	> 50,000 wfms/sec
Display	12.1-inch, capacitive touch	12.1-inch, capacitive touch	8.5-inch, capacitive touch	8.5-inch	7 inch
Zone touch trigger	Standard	Standard	Standard	No	No
Voice control	Standard	No	No	No	No
WaveGen 20-MHz function/arbitrary waveform generator	Dual-channel AWG (option)	Dual-channel AWG (option)	Single-channel AWG (option)	Single-channel function (option)	Single-channel function (on G models)
Integrated DVM	Standard	Standard	Standard	Standard	<b>Free with registration</b>
Integrated hardware counter (standard)	10-digit frequency, period, or totalizer counter	5-digit frequency or period counter (8 digits with external 10 MHz clock reference)	8-digit frequency, period, or totalizer counter	5-digit frequency counter	5 digits
Search and navigate	Standard, lister supported	Standard, lister supported	Standard, lister supported	Serial only	No
Segment memory	Standard	Standard	Standard	Option	Standard on DSO models
Mask/limit test	Option	Option	Option	Option	Standard on DSO models
Serial protocol analysis options	I <sup>2</sup> C/SPI, UART/RS232, CAN/CAN-dbc/CAN-FD/LIN/LIN symbolic, SENT, FlexRay, I <sup>2</sup> S, MIL-STD1553, CXPI, ARINC429, USB 2.0, Manchester/NRZ	I <sup>2</sup> C/SPI, UART/RS232, CAN/CAN-dbc/CAN-FD/LIN/LIN symbolic, SENT, FlexRay, I <sup>2</sup> S, MIL-STD1553, CXPI, ARINC429, USB 2.0, Manchester/NRZ	I <sup>2</sup> C/SPI, UART/RS232, CAN/CAN-dbc/CAN-FD/LIN/LIN symbolic, SENT, FlexRay, I <sup>2</sup> S, MIL-STD1553, CXPI, ARINC429, Manchester/NRZ	I <sup>2</sup> C/SPI, UART, CAN/LIN (will not operate simultaneously with digital channels)	I <sup>2</sup> C/SPI, UART, CAN/LIN
Advanced analysis options	Power analysis, USB 2.0 signal quality test, HDTV analysis, FRA	Power analysis, USB 2.0 signal quality test, HDTV analysis, FRA, NFC	Power analysis, HDTV analysis, FRA, NFC	No	FRA
Color grade	Standard	No	No	No	No
Histogram	Standard	No	No	No	No
FFT	Standard enhanced FFT	Standard enhanced FFT	Standard enhanced FFT	Standard	Standard
Multi-domain analysis	Gated FFT	Gated FFT	Gated FFT	No	No
Jitter analysis with clock recovery	Option	No	No	No	No
Realtime eye diagram	Option	No	No	No	No
Advanced math	Standard, display four functions simultaneously	Standard, display one function	Standard, display one function	No	No
Connectivity	Standard USB 2.0, LAN, video (GPIO option), USB mouse and keyboard support	Standard USB 2.0, LAN, video (GPIO option), USB mouse and keyboard support	Standard USB 2.0 (LAN/video/GPIO option), USB mouse and keyboard support	Standard USB 2.0 (LAN/video/GPIO option), USB keyboard support	Standard USB 2.0, USB keyboard support



## Need more bandwidth, sampling rate, and analysis?

Consider the Infiniium 6000 X-Series

- 1, 2.5, 4, and 6 GHz
- 20 GSa/s
- Ultra-low noise at 1 mV/div
- 12.1-inch multi-touch capacitive display with gesture support
- Standard color grade, histogram, and enhanced FFT
- Optional jitter and real-time eye diagram analysis

See [www.keysight.com/find/6000X-Series](http://www.keysight.com/find/6000X-Series) for more details.