Keysight Technologies

InfiniiVision X-Series Oscilloscope Family









Key specifications	InfiniiVision 2000A X-Series	InfiniiVision 3000T X-Series	InfiniiVision 4000A X-Series	InfiniiVision 6000A X-Series
Bandwidth	70/100/200 MHz	100/200/350/500 MHz, 1.0 GHz	200/350/500 MHz, 1.0/1.5 GHz	1/2.5/4/6 GHz
Sampling rate	2 GSa/s	5 GSa/s	5 GSa/s	20 GSa/s
Channels				
– Analog	2 or 4	2 or 4	2 or 4	2 or 4
– Digital	8	16	16	16
Memory	100 kpt standard	4 Mpts standard	4 Mpts standard	4 Mpts standard
- Option	1 Mpts option			
 Segmented memory 	Option	Standard	Standard	Standard
Waveform update rate	50,000	1,000,000	1,000,000	500,000
Display size	8.5 inch	8.5 inch	12.1 inch	12.1 inch
Capacitive touch screen	Not available	Standard	Standard	Standard, Multi-touch
Hardware zone trigger	Not available	Standard	Standard	Standard
Advanced math	Not available	Standard	Standard	Standard
AutoProbe interface	Not available	Standard, 2 active probes	Standard, 4 active probes	Standard, 4 active probes
Application bundle option	DSOX2APPBNDL	DSOXT3APPBNDL	DSOX4APPBNDL	DSOX6APPBNDL



Serial protocol trigger and decode	2000A-X	3000T-X	4000A-X	6000A-X
Aerospace and defense (MIL-STD 1553/ ARINC 429)		Χ	Χ	Χ
Audio (I ² S)		Χ	Χ	Χ
Automotive	Χ	Χ	Χ	Χ
- CAN	Χ	Χ	Χ	Χ
- LIN	Χ	Χ	Χ	Χ
- CAN-dbc		Χ	Χ	Χ
- CAN-FD		Χ	Χ	Χ
- CXPI		Χ	Χ	
Computer (RS232/UART)	Χ	Χ	Χ	Χ
Embedded (I ² C, SPI)	Χ	Χ	Χ	Χ
FlexRay		Χ	Χ	Χ
Single edge nibble transmission (SENT)		Χ	Χ	Χ
USB 2.0			Χ	Χ
Low/Full speed			Χ	Χ
Hi-speed			Χ	Χ
Measurement applications				
Enhanced video/TV application package		Χ	Χ	Χ
FPGA dynamic probe option for Xilinx			Χ	Χ
Jitter and real time eye analysis				Χ
Integrated 3-digit DVM/5 digit counter	Χ	Χ	Χ	Χ
Integrated 8-digit precision counter		Χ		
Integrated 10-digit precision counter				Χ
Mask limit testing	Χ	Χ	Χ	Χ
Power analysis application		Χ	Χ	Χ
USB 2.0 signal quality analysis			Χ	Χ
Near field communication testing		Χ	Χ	
WaveGen 20 MHz function generator	Χ	Χ	Χ	Χ
– AWG		Χ	Χ	Χ
- Dual channel			Χ	Χ
Productivity tools				
Education and training kit	Χ	Χ	Χ	Χ
N8900A Infiniium Offline oscilloscope analysis software	Χ	Χ	Χ	X
BenchVue	Χ	Χ	Χ	Χ
Oscilloscope spectrum visualizer (OSV)	Χ	Χ	Χ	Χ
Software application bundle	Χ	Χ	Х	Х

Standard passive probe Varies N2843A (500 MHz) (700 MHz) (700 MHz)	Standard and recommended optional probes	2000A-X	3000T-X	4000A-X	6000A-X
Passive probe 35 MHz, 1:1, 1 MW Recommended Recomme	Standard passive probe	Varies			
Passive probe 35 MHz, 1:1, 1 MWRecommended Recom	8 digital channel MSO cable	MSO models			
Passive probe 350 MHz, 10:1/1:1 switchable attenuation Recommended Recomme	16 digital channel MSO cable		MSO models	MSO models	MSO models
attenuationPassive probe 250 MHz 100:1 attenuation (4 kV)RecommendedRecommendedRecommendedRecommendedRecommendedActive single-ended probe 1 GHz 1 pF 1 MΩ with AutoProbeRecommendedRecommendedRecommendedRecommendedActive single-ended probe 1.5 GHz extremeRecommendedRecommendedRecommendedInfiniiMode differential probe 1.5 GHz 700 fFRecommendedRecommendedRecommended200 kΩ with AutoProbeDifferential active probe 100 MHz, ± 1.4 kV with AutoProbeRecommendedRecommendedRecommendedDifferential active probe 250 MHz, ± 700 VRecommendedRecommendedRecommended200 MHz 10:1 Differential Probe with AutoProbeRecommendedRecommendedRecommended800 MHz 10:1 Differential Probe with AutoProbeRecommendedRecommendedRecommendedAC/DC Current probe 100 kHz 100 ARecommendedRecommendedRecommendedAC/DC Current probe 50 MHz 15 A withRecommendedRecommendedRecommendedAutoProbeRecommendedRecommendedRecommended2-channel high-sensitivity current probe 50 μARecommendedRecommendedRecommended4 to 5 ARecommendedRecommendedRecommended1 -channel high-sensitivity current probe 50 μARecommendedRecommendedRecommended4 compatibleCompatibleCompatibleRecommendedAccessories and connectivity optionsCompatibleCompatibleRecommendedLAN/VGA connection moduleOptionOptionOpti	Passive probe 35 MHz, 1:1, 1 MW	Recommended	Recommended	Recommended	Recommended
Active single-ended probe 1 GHz 1 pF 1 MΩ with AutoProbeRecommendedRecommendedRecommendedActive single-ended probe 1.5 GHz extreme temperatureRecommendedRecommendedRecommendedInfiniiMode differential probe 1.5 GHz 700 fF 200 kΩ with AutoProbeRecommendedRecommendedRecommendedDifferential active probe 100 MHz, \pm 1.4 kV with AutoProbeRecommendedRecommendedRecommendedDifferential active probe 250 MHz, \pm 700 VRecommendedRecommendedRecommended200 MHz 10:1 Differential Probe with AutoProbeRecommendedRecommendedRecommended800 MHz 10:1 Differential Probe with AutoProbeRecommendedRecommendedRecommendedAC/DC Current probe 100 kHz 100 ARecommendedRecommendedRecommendedAC/DC Current probe 50 MHz 15 A with AutoProbeRecommendedRecommendedRecommendedAC/DC current probe 100 MHz 15 A with AutoProbeRecommendedRecommendedRecommendedAC/DC current probe 100 MHz 15 A with AutoProbeRecommendedRecommendedRecommendedAC/DC current probe 50 μ ARecommendedRecommendedRecommendedActive probe sensitivity current probe 50 μ ARecommendedRecommendedRecommended1 -channel high-sensitivity current probe 50 μ ARecommendedRecommendedRecommended1 -channel high-sensitivity optionsCompatibleCompatibleRecommendedLAN/VGA connection moduleOptionOptionOptionOptionAck mount kitOptio		Recommended	Recommended	Recommended	Recommended
AutoProbeActive single-ended probe 1.5 GHz extreme temperatureRecommendedRecommendedRecommendedInfiniiMode differential probe 1.5 GHz 700 fF 200 kQ with AutoProbeRecommendedRecommendedRecommendedDifferential active probe 100 MHz, ± 1.4 kV with AutoProbeRecommendedRecommendedRecommendedDifferential active probe 250 MHz, ± 700 VRecommendedRecommendedRecommended200 MHz 10:1 Differential Probe with AutoProbeRecommendedRecommendedRecommended800 MHz 10:1 Differential Probe with AutoProbeRecommendedRecommendedRecommendedAC/DC Current probe 100 kHz 100 ARecommendedRecommendedRecommendedAC/DC Current probe 50 MHz 15 A with AutoProbeRecommendedRecommendedRecommendedAC/DC current probe 100 MHz 15 A with AutoProbeRecommendedRecommendedRecommended2-channel high-sensitivity current probe 50 μA to 5 ARecommendedRecommendedRecommended1-channel high-sensitivity current probe 50 μA to 5 ARecommendedRecommendedRecommended1-channel high-sensitivity current probeCompatibleCompatibleRecommendedAccessories and connectivity optionsLAN/VGA connection moduleOptionOptionOptionOptionFront panel coverOptionOptionOptionOptionOptionFront panel coverOptionOptionOptionOptionSoft carrying caseOptionOptionOptionOptionOption<	Passive probe 250 MHz 100:1 attenuation (4 kV)	Recommended	Recommended	Recommended	Recommended
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$			Recommended	Recommended	Recommended
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Recommended	Recommended	Recommended
AutoProbeDifferential active probe 250 MHz, ± 700 VRecommendedRecommendedRecommended200 MHz 10:1 Differential Probe with AutoProbeRecommendedRecommendedRecommended800 MHz 10:1 Differential Probe with AutoProbeRecommendedRecommendedRecommendedAC/DC Current probe 100 kHz 100 ARecommendedRecommendedRecommendedAC/DC Current probe 50 MHz 15 A withRecommendedRecommendedRecommendedAC/DC current probe 100 MHz 15 A withRecommendedRecommendedRecommendedAutoProbe2-channel high-sensitivity current probe 50 μARecommendedRecommendedRecommended1-channel high-sensitivity current probe 50 μARecommendedRecommendedRecommendedRecommended1-channel high-sensitivity current probe 50 μARecommendedRecommendedRecommendedRecommendedRecommended1-channel high-sensitivity current probe 50 μARecommendedRecommended </td <td></td> <td></td> <td>Recommended</td> <td>Recommended</td> <td>Recommended</td>			Recommended	Recommended	Recommended
200 MHz 10:1 Differential Probe with AutoProbeRecommendedRecommendedRecommended800 MHz 10:1 Differential Probe with AutoProbeRecommendedRecommendedRecommendedAC/DC Current probe 100 kHz 100 ARecommendedRecommendedRecommendedAC/DC Current probe 50 MHz 15 A with AutoProbeRecommendedRecommendedRecommendedAC/DC current probe 100 MHz 15 A with AutoProbeRecommendedRecommendedRecommended2-channel high-sensitivity current probe 50 μA to 5 ARecommendedRecommendedRecommended1-channel high-sensitivity current probe 50 μA to 5 ARecommendedRecommendedRecommendedLow noise 2 GHz power rail probeCompatibleCompatibleRecommendedAccessories and connectivity optionsCompatibleCompatibleRecommendedLAN/VGA connection moduleOptionOptionStandardStandardGPIB connection moduleOptionOptionOptionOptionOptionFront panel coverOptionOptionOptionOptionOptionSoft carrying caseOptionOptionOptionOptionOption			Recommended	Recommended	Recommended
800 MHz 10:1 Differential Probe with AutoProbeRecommendedRecommendedRecommendedAC/DC Current probe 100 kHz 100 ARecommendedRecommendedRecommendedAC/DC Current probe 50 MHz 15 A with AutoProbeRecommendedRecommendedRecommendedAC/DC current probe 100 MHz 15 A with AutoProbeRecommendedRecommendedRecommended2-channel high-sensitivity current probe 50 μA to 5 ARecommendedRecommendedRecommended1-channel high-sensitivity current probe 50 μA to 5 ARecommendedRecommendedRecommendedLow noise 2 GHz power rail probeCompatibleCompatibleRecommendedAccessories and connectivity optionsCompatibleRecommendedLAN/VGA connection moduleOptionOptionStandardGPIB connection moduleOptionOptionOptionOptionFront panel coverOptionOptionOptionOptionRack mount kitOptionOptionOptionOptionSoft carrying caseOptionOptionOptionOption	Differential active probe 250 MHz, ± 700 V		Recommended	Recommended	Recommended
AC/DC Current probe 100 kHz 100 ARecommendedRecommendedRecommendedAC/DC Current probe 50 MHz 15 A with AutoProbeRecommendedRecommendedRecommendedAC/DC current probe 100 MHz 15 A with AutoProbeRecommendedRecommendedRecommended2-channel high-sensitivity current probe 50 μA to 5 ARecommendedRecommendedRecommended1-channel high-sensitivity current probe 50 μA to 5 ARecommendedRecommendedRecommendedLow noise 2 GHz power rail probeCompatibleCompatibleRecommendedAccessories and connectivity optionsCompatibleRecommendedLAN/VGA connection moduleOptionOptionStandardGPIB connection moduleOptionOptionOptionOptionFront panel coverOptionOptionOptionOptionOptionRack mount kitOptionOptionOptionOptionOptionSoft carrying caseOptionOptionOptionOptionOption	200 MHz 10:1 Differential Probe with AutoProbe		Recommended	Recommended	Recommended
AC/DC Current probe 50 MHz 15 A with AutoProbeRecommendedRecommendedRecommendedAC/DC current probe 100 MHz 15 A with AutoProbeRecommendedRecommendedRecommended2-channel high-sensitivity current probe 50 μA to 5 ARecommendedRecommendedRecommended1-channel high-sensitivity current probe 50 μA to 5 ARecommendedRecommendedRecommendedLow noise 2 GHz power rail probeCompatibleCompatibleRecommendedAccessories and connectivity optionsCompatibleRecommendedLAN/VGA connection moduleOptionOptionStandardGPIB connection moduleOptionOptionOptionOptionFront panel coverOptionOptionStandardStandardRack mount kitOptionOptionOptionOptionOptionSoft carrying caseOptionOptionOptionOptionOption	800 MHz 10:1 Differential Probe with AutoProbe		Recommended		Recommended
AutoProbe AC/DC current probe 100 MHz 15 A with AutoProbe 2-channel high-sensitivity current probe 50 μA to 5 A 1-channel high-sensitivity current probe 50 μA to 5 A Low noise 2 GHz power rail probe Accessories and connectivity options LAN/VGA connection module GPIB connection module Option	AC/DC Current probe 100 kHz 100 A		Recommended	Recommended	Recommended
AutoProbe 2-channel high-sensitivity current probe 50 μA to 5 A 1-channel high-sensitivity current probe 50 μA to 5 A Low noise 2 GHz power rail probe Accessories and connectivity options LAN/VGA connection module Option GPIB connection module Option Option Option Option Option Option Standard Standard GPIB connection module Option			Recommended	Recommended	Recommended
to 5 A 1-channel high-sensitivity current probe 50 μA to 5 A Low noise 2 GHz power rail probe Accessories and connectivity options LAN/VGA connection module Option Option Option Option Option Option Option Option Front panel cover Rack mount kit Option			Recommended	Recommended	Recommended
to 5 A Low noise 2 GHz power rail probe Compatible Recommended Accessories and connectivity options LAN/VGA connection module Option Option Standard Standard GPIB connection module Option Option Option Option Front panel cover Option Option Standard Standard Rack mount kit Option Option Option Option Option Soft carrying case Option Option Option Option Option			Recommended	Recommended	Recommended
Accessories and connectivity options LAN/VGA connection module Option Option Standard Standard GPIB connection module Option Option Option Option Front panel cover Option Option Standard Standard Rack mount kit Option Option Option Option Soft carrying case Option Option Option Option Option			Recommended	Recommended	Recommended
LAN/VGA connection moduleOptionOptionStandardStandardGPIB connection moduleOptionOptionOptionOptionFront panel coverOptionOptionStandardStandardRack mount kitOptionOptionOptionOptionSoft carrying caseOptionOptionOptionOption	Low noise 2 GHz power rail probe		Compatible	Compatible	Recommended
GPIB connection module Option Option Option Option Front panel cover Option Option Standard Standard Rack mount kit Option Option Option Option Soft carrying case Option Option Option Option	Accessories and connectivity options				
Front panel cover Option Option Standard Standard Rack mount kit Option Option Option Option Soft carrying case Option Option Option Option	LAN/VGA connection module	Option	Option	Standard	Standard
Rack mount kitOptionOptionOptionOptionSoft carrying caseOptionOptionOptionOption	GPIB connection module	Option	Option	Option	Option
Soft carrying case Option Option Option Option	Front panel cover	Option	Option	Standard	Standard
	Rack mount kit	Option	Option	Option	Option
Hard copy manual Option Option Option Option	Soft carrying case	Option	Option	Option	Option
	Hard copy manual	Option	Option	Option	Option

www.keysight.com/find/infiniivision

