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Data Sheet

August 31, 2026

AGILENT / KEYSIGHT

Agilent / Keysight DSOX4034A Oscilloscope: 350 MHz, 4 Analog Channels

Agilent Keysight DSOX4034A Digital Storage Oscilloscope 350 MHz 4 ch The Keysight InfiniiVision DSOX4034A is a 4000 X-Series oscilloscope with 350 MHz analog bandwidth and 4 analog channels. OEM 4000 X-Series data sheet 5991-1103 lists 5 GSa/s half channel / 2.5 GSa/s all channel sample rate, 4 Mpts half / 2 Mpts all memory, all channel real time bandwidth 350 MHz, and a 12.1 inch capacitive touch display. Embedded mixed signal debug, serial protocol analysis, and touch zone triggered design validation on the 4000 X-Series platform. The Keysight InfiniiVision DSOX4034A is a 4000 X-Series oscilloscope with 350 MHz analog bandwidth and 4 analog channels. OEM 4000 X-Series data sheet 5991-1103 lists 5 GSa/s half channel / 2.5 GSa/s all channel sample rate, 4 Mpts half / 2 Mpts all memory, all channel real time bandwidth 350 MHz, and a 12.1 inch capacitive touch display. Embedded mixed signal debug, serial protocol analysis, and touch zone triggered design validation on the 4000 X-Series platform. Greater than 1 million waveforms per second update rate



MODEL

**Agilent / Keysight
DSOX4034A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

DSOX4034A

LISTING

<https://aumictechlabs.com/products/dsox4034a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight DSOX4034A is a 350 MHz, 4-analog channel digital storage oscilloscope built for signal analysis and waveform capture on the benchtop. It delivers real-time bandwidth across all channels, a 1 million waveforms per second update rate, and MegaZoom IV memory technology for extended acquisitions. The 12.1-inch capacitive touch display provides intuitive operation, while Zone touch triggering enables rapid signal isolation. Maximum sample rates reach 5 GSa/s (single channel) and 2.5 GSa/s (all channels) with 4 Mpts standard memory. The instrument accepts input sensitivities from 1 mV/div to 5 V/div across both 1 M Ω and 50 Ω impedances, with 8-bit vertical resolution (12 bits with averaging). DC vertical gain accuracy is $\pm 2.0\%$ full scale; offset accuracy is ± 0.1 div ± 2 mV $\pm 1\%$ of offset setting. Channel isolation exceeds 40 dB DC to maximum bandwidth. A selectable 20 MHz hardware bandwidth limit is available. The DSOX4034A integrates oscilloscope, logic analyzer, digital voltmeter, and optional serial protocol analyzer and arbitrary function generator functionality. It operates from 100–240 V AC mains and measures 275 mm (W) $\times$ 156 mm (H) $\times$ 454 mm (D), weighing 25 lbs. The instrument is fully upgradable, including bandwidth expansion to 1.5 GHz, supporting both analog and optional 16 digital channels.

Technical Specifications

Bandwidth:	350 MHz (all channels)
Rise Time (10–90%):	≤ 1 ns
Waveform Update Rate:	$> 1,000,000$ waveforms/sec
Sample Rate:	5 GSa/s (half channel); 2.5 GSa/s (all channels)
Memory Depth:	4 Mpts standard; segmented memory architecture
Analog Channels:	4
Digital Channels:	16 (MSO models or via upgrade)
Display:	12.1-inch capacitive touch, TFT LCD, high-definition
Input Sensitivity:	1 mV/div to 5 V/div (1 M Ω and 50 Ω)
Vertical Resolution:	8 bits (12 bits with averaging)
DC Gain Accuracy:	$\pm 2.0\%$ full scale
DC Offset Accuracy:	± 0.1 div ± 2 mV $\pm 1\%$ of offset setting
Channel Isolation:	≥ 40 dB DC to max bandwidth
Input Coupling:	AC, DC
Hardware Bandwidth Limit:	~ 20 MHz (selectable)
Dimensions:	275 mm (W) $\times$ 156 mm (H) $\times$ 454 mm (D)
Weight:	25 lbs
Input Voltage:	100–240 V AC

Key Features

- MegaZoom IV smart memory with segmented capture modes
- InfiniiScan Zone touch triggering for rapid event isolation
- Single-instrument integration: oscilloscope, logic analyzer, DVM, optional WaveGen (20 MHz, dual-channel) and serial protocol analyzer
- Bandwidth upgradeable to 1.5 GHz
- High waveform update rate minimizes blind time in signal observation

Typical Applications

- General-purpose analog signal measurement and debug
- Multi-protocol serial analysis with optional upgrades
- Mixed-signal verification via MSO configuration
- Power supply and switching transient characterization
- Embedded systems development and troubleshooting

Compatibility & Integration

The DSOX4034A belongs to the InfiniiVision 4000 X-Series platform, allowing flexible feature expansion without instrument replacement. Optional modules enable logic analysis, serial decoding, and arbitrary waveform generation without occupying additional bench space.

DSOX4034A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Digital Storage Oscilloscope
Series Family	InfiniiVision 4000 X-Series
Model	DSOX4034A
Analog Bandwidth	350 MHz (minus 3 dB)
All Channel Real Time Bandwidth	350 MHz
Calculated Rise Time 10 to	1 ns or less
Analog Channels	4
Digital Channels	not included on DSO model (MSO upgrade path)
Maximum Sample Rate Half Channel	5 GSa/s
Maximum Sample Rate All Channels	2.5 GSa/s
Equivalent Sample Rate	N/A
Maximum Memory Depth Half Channel	4 Mpts
Maximum Memory Depth All Channels	2 Mpts
Digital Channel Sample Rate	1.25 GSa/s
Waveform Update Rate	greater than 1 million waveforms per second
Display	12.1 inch high definition capacitive touch
Vertical Resolution	8 bits (12 bits with averaging)
Input Impedance	1 MOhm plus or minus 1 percent (16 pF); 50 ohm plus or minus 1.5 percent
Input Sensitivity Range	1 mV/div to 5 V/div (1 MOhm and 50 ohm) for 200 to 500 MHz models
Hardware Bandwidth Limit	approximately 20 MHz selectable
DC Vertical Gain Accuracy	plus or minus 2.0 percent full scale (warranted after 30 min warm up)
DC Vertical Offset Accuracy	plus or minus 0.1 div plus or minus 2 mV plus or minus 1 percent of offset setting
Offset Range	plus or minus 5 V (less than 10 mV/div); plus or minus 20 V (10 to 200 mV/div); plus or minus 75 V (greater than 200 mV/div)
Maximum Input Voltage 1 MOhm	135 Vrms

PARAMETER	VALUE
Maximum Input Voltage 50 Ohm	5 Vrms or less
Channel To Channel Isolation	40 dB or greater from DC to maximum specified bandwidth (200 MHz to 1 GHz models)
Time Base Range	1 ns/div to 50 s/div
Time Base Accuracy	plus or minus 10 ppm (warranted)
Peak Detect Glitch Width	200 ps at all time base settings
Digital Min Detectable Pulse Width	2 ns
Digital Channel To Channel Skew Typical	2 ns
Digital Channel To Channel Skew Maximum	3 ns
WaveGen Option	optional dual channel 20 MHz function/AWG (DSOX4WAVEGEN2)
Connectivity Standard	USB 2.0 host x3 device x1, LAN, VGA out
Dimensions WxHxD	454 mm x 275 mm x 156 mm
Weight Net	6.3 kg (13.9 lb)
Weight Shipping	11.4 kg (25 lb)
Form Factor	benchtop oscilloscope
Bandwidth	350 MHz (minus 3 dB)
Rise Time	10 to 90: 1 ns or less

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Hardware Bandwidth Limit	approximately 20 MHz selectable
DC Vertical Gain Accuracy	plus or minus 2.0 percent full scale (warranted after 30 min warm up)
DC Vertical Offset Accuracy	plus or minus 0.1 div plus or minus 2 mV plus or minus 1 percent of offset setting
Offset Range	plus or minus 5 V (less than 10 mV/div); plus or minus 20 V (10 to 200 mV/div); plus or minus 75 V (greater than 200 mV/div)
Maximum Input Voltage 1 MOhm	135 Vrms

PARAMETER	VALUE
Maximum Input Voltage 50 Ohm	5 Vrms or less
Channel To Channel Isolation	40 dB or greater from DC to maximum specified bandwidth (200 MHz to 1 GHz models)
Time Base Range	1 ns/div to 50 s/div
Time Base Accuracy	plus or minus 10 ppm (warranted)
Peak Detect Glitch Width	200 ps at all time base settings
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Digital Channel To Channel Skew Maximum	3 ns
WaveGen Option	optional dual channel 20 MHz function/AWG (DSOX4WAVEGEN2)
Connectivity Standard	USB 2.0 host x3 device x1, LAN, VGA out

Optional Interfaces: GPIB option

Specifications

PARAMETER	VALUE
Dimensions WxHxD	454 mm x 275 mm x 156 mm
Weight Net	6.3 kg (13.9 lb)
Weight Shipping	11.4 kg (25 lb)
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Notes
Numeric rows from Keysight InfiniiVision 4000 X-Series oscilloscope data sheet 5991-1103 model columns for DSOX4034A. 1.5 GHz real time bandwidth is half channel or full channel equivalent time on 4154 models.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.