

Keysight InfiniiVision MSOX3054G

Mixed Signal Oscilloscope • 500 MHz • 4 Analog + 16 Digital Channels • WaveGen



Product Overview

The Keysight InfiniiVision MSOX3054G is a high-performance mixed-signal oscilloscope from the 3000G X-Series. It offers 500 MHz bandwidth, 4 analog + 16 digital channels, up to 5 GSa/s sample rate and 4 Mpts memory, combined with a responsive 8.5-inch capacitive touch screen. Standard features include Zone touch triggering, waveform and measurement histograms, a built-in 20 MHz arbitrary waveform generator, protocol decode, frequency response analysis (Bode plots), and an integrated DVM/counter. Ideal for embedded design, power integrity, serial bus debugging and mixed-signal validation.

Key Features

- 500 MHz bandwidth, up to 5 GSa/s sample rate
 - 8.5-inch capacitive touch screen + Zone trigger
 - 1,000,000 waveforms/sec update rate
 - Standard protocol decode (I²C, SPI, UART, I²S, USB-PD)
 - Frequency response analysis (Bode plots)
- 4 analog + 16 digital (MSO) channels
 - Up to 4 Mpts memory depth
 - Built-in 20 MHz arbitrary waveform generator
 - Waveform & measurement histograms
 - Integrated 3-digit DVM + 8-digit counter

Technical Specifications

Parameter	Specification
Model	Keysight InfiniiVision MSOX3054G (3000G X-Series)
Bandwidth	500 MHz
Analog Channels	4
Digital Channels (MSO)	16
Maximum Sample Rate	5 GSa/s (half channels) / 2.5 GSa/s (all channels)
Maximum Memory Depth	4 Mpts
Waveform Update Rate	Up to 1,000,000 wfms/s
Vertical Resolution	8 bits
Display	8.5-inch capacitive touch TFT LCD (gesture-enabled)
Built-in Instruments	20 MHz WaveGen, 3-digit DVM, 8-digit counter/totalizer
Connectivity	USB Host/Device, LAN, VGA (optional module)
Dimensions / Weight	Approx. 381 × 204 × 142 mm / 4.2 kg
Standard Accessories	N2843A passive probes (1 per channel), N2756A MSO cable, power cord, calibration cert.

Typical Applications

Embedded system design & debugging • Serial bus protocol analysis • Power integrity and power supply testing • Mixed-signal validation • Frequency response / Bode plot measurements • Education and general-purpose lab use

■ Always follow Keysight safety instructions and applicable standards. Use only by qualified personnel. Factory 3-year warranty included.