

KEYSIGHT TECHNOLOGIES (AGILENT HP)

DSO6054A

The Keysight (formerly Agilent) DSO6054A is a 500 MHz, 4-channel digital storage oscilloscope from the InfiniiVision 6000 Series. Featuring MegaZoom III deep memory technology, a high-definition XGA color display, and a waveform update rate of up to 100,000 waveforms per second, it delivers powerful signal analysis and versatile triggering for embedded systems design and debugging.

SPECIFICATIONS

General

Interfaces	USB 2.0 (host and device), LAN (10/100Base-T, LXI Class C), GPIB, XGA video output
Display	6.3-inch color XGA TFT LCD, 1024 x 768 resolution, 256 intensity levels
Built-in Help System Languages	11 (English, French, German, Italian, Spanish, Portuguese, Russian, Japanese, Simplified Chinese, Traditional Chinese, Korean)

Physical

Power Supply	100 - 240 VAC, 50/60 Hz; 100 - 120 VAC, 400 Hz; 120 W maximum
Operating Temperature	0 to +55 °C °C
Dimensions (W×H×D)	354 mm × 188 mm × 282 mm mm
Weight	4.9 kg

Vertical System - Analog Channels

Analog Bandwidth	500 MHz
Number of Analog Channels	4
Calculated Rise Time	700 ps
Vertical Resolution	8 bits
DC Vertical Gain Accuracy	±2.0% of full scale
Maximum Input Voltage	CAT I 300 Vrms, 400 Vpk (1 MΩ); 5 Vrms (50 Ω)

Horizontal System - Timebase

Main Timebase Range	500 ps/div to 50 s/div
Timebase Accuracy	±15 ppm
Horizontal Modes	Main, Zoom, Roll, XY

Acquisition System

Maximum Real-time Sample Rate	4 GSa/s (half-channel interleaved), 2 GSa/s (all-channel)
Maximum Memory Depth	1 Mpts standard (half-channel), 500 kpts standard (all-channel); up to 8 Mpts optional (half-channel), 4 Mpts optional (all-channel)
Acquisition Modes	Normal, Peak Detect, Averaging, High Resolution
Peak Detect Resolution	250 ps
High-Resolution Mode Resolution	Up to 12 bits of resolution (real-time, single-shot)
Waveform Update Rate	Up to 100,000 waveforms/s

Trigger System

Trigger Sources	Channel 1, Channel 2, Channel 3, Channel 4, Line, External
Trigger Modes	Auto, Normal, Single
Trigger Coupling	AC, DC, LF Reject, HF Reject, Noise Reject
Video/TV Triggering	NTSC, PAL, SECAM, HDTV (480i, 480p, 576i, 576p, 720p, 1080i, 1080p)
Trigger Level Range (Internal)	±6 div from center of screen

Waveform Measurements and Analysis

FFT Window Functions	Hanning, Flat Top, Rectangular, Blackman-Harris
Hardware Counter	Built-in 5-digit hardware counter

Connectivity and Interfaces

LAN Port	10/100Base-T, LXI Class C
GPIO Interface	Standard IEEE 488.2 interface
Trigger Output Connection	Rear panel BNC (Trig out)
Video Out Port	Rear panel XGA (15-pin D-sub)

Ordering Information and Hardware Options

Standard Included Probes	10073C 10:1 passive probes (one per channel)
--------------------------	--

Vertical System

DC Vertical Offset Range (1 MΩ)	±2 V (2 mV/div to 200 mV/div), ±50 V (>200 mV/div to 5 V/div)
---------------------------------	---

Power Specifications

Power Consumption	120 W maximum
-------------------	---------------

Display

Display Size & Type	6.3-inch diagonal color TFT LCD
---------------------	---------------------------------

Performance

Hardware Frequency Counter Resolution	5-digit
---------------------------------------	---------

Connectivity

Probe Interface	Agilent AutoProbe interface
LXI Compliance	LXI Class C

Power

Mains Frequency Range	50/60 Hz (100 to 240 VAC), 400 Hz (100 to 120 VAC)
-----------------------	--

Environmental

Operating Shock	30 g, half-sine, 11 ms duration
Operating Vibration	0.3 g rms (5 Hz to 500 Hz), random
Non-operating Vibration	2.41 g rms (5 Hz to 500 Hz), random

Compliance

Transient Overvoltage Category	Installation Category II
Pollution Degree	Pollution Degree 2

TECHNOLOGY

Digital Storage Oscilloscope (DSO)

APPLICATIONS

Embedded hardware design, debugging, automotive bus testing, education, and R&D

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.