

KEYSIGHT TECHNOLOGIES (AGILENT HP)

54503A

The Keysight (Agilent/HP) 54503A is a 500 MHz, 4-channel digitizing oscilloscope designed for repetitive and single-shot waveform measurements. Part of the legendary HP 54500 series, it features an 8-bit vertical resolution, a maximum real-time sample rate of 20 MSa/s, and selectable 1 M Ω or 50 Ω input impedance on all four channels.

SPECIFICATIONS

General

Interfaces	HP-IB (IEEE-488) interface with full system programmability
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Vertical System

Number of Channels	4
Analog Bandwidth (-3 dB)	500 MHz (on all channels)
Calculated Rise Time	< 700 ps
Vertical Resolution	8 bits (up to 12 bits with averaging)
Vertical Sensitivity Range	1 mV/div to 5 V/div
Input Impedance	1 M Ω (parallel with approx 7 pF) or 50 Ω (selectable)
Maximum Input Voltage (1 M Ω)	± 250 V (DC + peak AC)
Maximum Input Voltage (50 Ω)	5 V rms

Acquisition System

Maximum Real-Time Sample Rate	20 MSa/s
Single-Shot Bandwidth	2 MHz

Trigger System

Trigger Sources	Channels 1, 2, 3, 4, Line
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Environmental and Safety

Operating Altitude	Up to 4,600 m (15,000 ft)
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Inputs & Outputs

Input Capacitance (1 M Ω)	~ 7 pF
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Power

Maximum Power Consumption	350 VA
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TECHNOLOGY

Digitizing Oscilloscope

APPLICATIONS

Electronic circuit test, high-frequency signal analysis, and laboratory measurement

