

KEYSIGHT TECHNOLOGIES (AGILENT HP)

54100D

The HP Keysight 54100D is a vintage 1 GHz digitizing oscilloscope designed for high-speed digital design and general-purpose electronic test applications. Known for its early leadership in digitizing technology, it offers dual-channel operation with extensive logic and state triggering options.

SPECIFICATIONS

General

Interfaces	HP-IB (IEEE-488)
Display	9-inch monochrome CRT

Physical

Power Supply	115 / 230 V AC (nominal), 48 - 66 Hz, 200 W max
Operating Temperature	0 °C to +55 °C °C
Dimensions (W×H×D)	425.5 mm × 194.3 mm × 563.9 mm mm
Weight	20.4 kg kg

Vertical System

Analog Bandwidth (-3 dB)	1 GHz
Calculated Rise Time (10% to 90%)	350 ps
Number of Input Channels	2
Vertical Resolution	7 bits
Minimum Vertical Sensitivity	10 mV/div
Maximum Vertical Sensitivity	1 V/div
Input Impedance	50 Ω (with HP 54002A pod) / 10 kΩ, 2 pF (with HP 54001A active probe)
Input Connectors	HP Probe Interface (for HP 54000-series active pods)
A/D Converter Resolution	7-bit

Horizontal System

Timebase Range	100 ps/div to 1 s/div
Timebase Delay Range	0 to 10 s

Acquisition System

Maximum Real-Time Sample Rate	40 MSa/s
Maximum Single Shot Bandwidth	4 MHz
Maximum Record Length	1024 pt

Trigger System	
Trigger Types	Edge, Pattern, State, Time-qualified, Event-qualified

Performance	
Time Interval Measurement Resolution	10 ps

Triggering	
Pattern Triggering	4-bit pattern (Ch 1, Ch 2, Trig 3, Trig 4)
Delay by Events Range	1 to 99,999,999 events
External Trigger Inputs	2 (Trig 3 and Trig 4)
State Triggering Maximum Clock Rate	200 MHz
State Triggering Minimum Clock Width	2.5 ns
Trigger Jitter	< 10 ps RMS

Display	
CRT Display Resolution	512 × 256 pixels
Display Type	Monochrome green phosphor raster-scan CRT

Memory	
Waveform Memories	Two 1024-point memories
Pixel Memories	Two pixel memories

TECHNOLOGY

Digitizing Oscilloscope

APPLICATIONS

High-Speed Digital Design, Pulse Analysis, and Electronic Test

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