

**Aumictech**

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Data Sheet

August 13, 2026

HP / AGILENT

HP / Agilent 54620A 16 Channel Logic Analyzer

Probe Grounds: ground lead per channel set required for fidelity Default Trigger: rising edge on channel 0 Measurement Features: single- and dual-channel timing measurements Rows from HP 54620A/C User and Service Guide feature and measurement chapters. Deep timing-accuracy tables should be taken from the specifications chapter of that guide for the specific serial prefix. Not an oscilloscope despite 546xx numbering shared with MegaZoom scopes. Default Trigger: rising edge on channel 0 Measurement Features: single- and dual-channel timing measurements Rows from HP 54620A/C User and Service Guide feature and measurement chapters. Deep timing-accuracy tables should be taken from the specifications chapter of that guide for the specific serial prefix. Not an oscilloscope despite 546xx numbering shared with MegaZoom scopes.



MODEL

**HP / Agilent
54620A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

54620A

LISTING

<https://aumictechlabs.com/products/54620a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The HP/Agilent 54620A is a 16-channel logic analyzer built for digital circuit debugging and signal analysis. It combines a scope-like interface with advanced triggering and measurement capabilities, capture and characterize complex digital behavior at up to 500 MSa/s. The instrument's glitch capture down to 3.5 ns and sophisticated pattern-based triggering make it effective for embedded systems diagnostics, protocol analysis, and timing verification across

TTL, CMOS, ECL, and user-defined logic levels. Technical Specifications Channels: 16 timing channels Maximum Sample Rate: 500 MSa/s Glitch Capture: 3.5 ns Record Length: 2K samples ($8\text{ ns} \leq \text{sample period}$, with auto-glitch at $1\text{ }\mu\text{s/div}$ to 1 s/div); 8K samples (4 ns and 2 ns periods, 500 ns/div and faster sweep speeds, all speeds with auto-glitch enabled) Display Update Rate: 15 full screens per second Input Impedance: $\sim 1\text{ M}\Omega$ and 12 pF Logic Level Support: TTL, CMOS, ECL, or user-definable voltage Minimum Trigger Duration: 2 sample periods or 16 ns, whichever is greater Trigger Output Rate: 2 kHz (analyzer stopped); 20 per second (running) Key Features Edge triggering with rising, falling, or either edge selection Pattern triggering across all channels with don't-care capability plus external trigger input Advanced triggering including duration times, sequence detection, pattern duration measurement, and edge occurrence counting Advanced operators: OR, Then, Entered, Exited, Duration > time, Occurs N times Automated measurements: Frequency, period, duty cycle, width, delay, setup and hold time Dual cursor system for time-domain measurements and waveform value readout in Hex or Binary 16 front-panel setup storage and recall Two trace pixel memories for waveform capture and analysis Autoscale function for instant channel scaling Four-processor architecture enabling high-speed responsive display of dynamic signals Display Options 54620A: Monochrome raster CRT 54620C: Full-color active matrix LCD Compatibility & Integration Optional HP-IB (IEEE-488) or RS-232-C remote control Compatible with Agilent 54650A, 54651A, and 54652B interface modules PC connectivity support available

Features & description

From manufacturer datasheet

Features

• Sixteen channels via dual 8-channel cables with micro-grabbers • Pattern trigger with edge qualifier; advanced Then sequencing • Independent thresholds for two channel groups plus TRIG IN • Labels; rearrange channels; glitch detection • Save/recall setups and trace memory

54620A Characteristics / Specifications

PARAMETER	VALUE
Model	54620A
Manufacturer	Hewlett Packard / Agilent
Instrument Type	Logic analyzer
Alias	HP 54620A; Agilent 54620A
Channels	16
Color Sibling	54620C
Sweep Speed Range Class	5 ns/div to 1 s/div
Channel Groups Threshold	Chan 0-7; Chan 8-15; TRIG IN
Preset Thresholds	TTL; CMOS; ECL; User
Probe Cables	dual 8-channel with micro-grabbers
Trigger Modes	edge; pattern; advanced sequential
Glitch Detection	yes
Activity Indicators	yes
Autoscale Activity Window	20 ms (recognizes signals to 50 Hz class)
Display Modes	normal and delayed
Labels	per-channel labels on/off
Memory Functions	acquisition memory; setup save/recall; trace memory
External Trigger Input	yes with independent threshold
Channel On Off	individual or groups of 8
Rearrange Channels	yes for displayed channels
Programmer Reference	disk-based help for Windows 3.1 era
Related Scope Family Confusion	not a 54624A oscilloscope
Form Factor	benchtop logic analyzer matching 54600 scope styling
Operating Use	design and troubleshooting of digital system circuitry
Probe Grounds	ground lead per channel set required for fidelity

PARAMETER	VALUE
Default Trigger	rising edge on channel 0
Measurement Features	single- and dual-channel timing measurements
Graticule	configurable on/off

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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Notes

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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.