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**Data Sheet**

August 31, 2026

HP / AGILENT

# HP / Agilent 54622A 2-Channel, 100 MHz Oscilloscope

The Agilent 54622A is a 2-channel MegaZoom oscilloscope with 100 MHz bandwidth, 200 MSa/s maximum sample rate, and 4 MB interleaved MegaZoom deep memory (2 MB per channel). OEM 54600-series datasheets specify 5 ns peak detection, 8-bit vertical resolution (12-bit high-resolution mode at slow sweeps), and a high-definition deep-memory display that remains responsive without a special deep-memory mode. General-purpose 100 MHz embedded debug, long non-repeating capture with deep memory, and zooming on anomalies while maintaining high sample rate. BW Limit: approximately 20 MHz selectable Channel Isolation dc to 20 MHz: greater than 40 dB Noise Peak to Peak: 2% full scale or 1 mV, whichever greater Specs from Agilent Technologies 54600-Series Oscilloscopes data sheet rows for 54622A. 1 mV/div is a magnification of 2 mV/div; use 16 mV full scale for accuracy math at 1 mV/div.



MODEL

**HP / Agilent  
54622A**

CALIBRATION

**Available on  
request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**54622A**

LISTING

<https://aumictechlabs.com/products/54622a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

## This unit

The HP/Agilent 54622A is a 2-channel, 100 MHz digital storage oscilloscope built for signal analysis and electronics troubleshooting. It captures waveforms at up to 200 MSa/s per channel

and stores them in 4 MB of MegaZoom deep memory, enabling detailed examination of complex signals without sacrificing sample rate. With 8-bit vertical resolution, vertical sensitivity from 1 mV/Div to 5 V/Div, and a time base spanning 5 ns/Div to 50 S/Div, the instrument handles both fast transients and low-frequency phenomena. A 3.5 ns rise time and high-definition display with 32-level intensity mapping support detailed signal characterization.

**Technical Specifications**

Bandwidth: 100 MHz Channels: 2 Sample Rate: 200 MSa/s maximum per channel Memory Depth: 4 MB total (2 MB per channel when both active; up to 4 MB on single channel in Single mode)

Vertical Resolution: 8 bits Vertical Sensitivity: 1 mV/Div to 5 V/Div Time Base Range: 5 ns/Div to 50 S/Div Input Impedance: 1 M $\Omega$  with 14 pF Rise Time: 3.5 ns Waveform Update Rate: Up to 25 million vectors/sec Power Consumption: 100 W maximum Operating Temperature: -10 °C to +55 °C Operating Altitude: Up to 4,570 m (15,000 ft)

**Key Features** Advanced triggering supports I<sup>2</sup>C, SPI, LIN, CAN, and USB protocol decoding Edge, pulse width, line selectable, video, and pattern triggering modes High-definition display with intensity mapping for deep memory waveforms RS-232 and parallel ports for instrument control and data transfer Built-in 1.44 MB floppy disk drive for waveform and setup storage Optional IEEE 488.2 (GPIB) interface module available

**Typical Applications** Protocol analysis, digital and mixed-signal debugging, power supply characterization, automotive diagnostics, and embedded systems development.

**Compatibility & Integration** IntuiLink PC software enables waveform data transfer to personal computers. Printer output supports HP DeskJet, HP LaserJet (PCL 3 or greater), Epson, and Seiko DPU-414 models. GPIB interface module allows integration into automated test environments.

## 54622A Characteristics / Specifications

| PARAMETER                        | VALUE                                               |
|----------------------------------|-----------------------------------------------------|
| Analog Channels                  | 2 simultaneous                                      |
| Bandwidth DC Coupled             | dc to 100 MHz                                       |
| Bandwidth AC Coupled             | 3.5 Hz to 100 MHz                                   |
| Calculated Risetime              | approximately 3.5 ns                                |
| Max Sample Rate                  | 200 MSa/s                                           |
| Max Memory Depth Interleaved     | 4 MB                                                |
| Max Memory Depth Per Channel     | 2 MB                                                |
| Single Shot Bandwidth            | 50 MHz                                              |
| Vertical Resolution              | 8 bits                                              |
| Peak Detection                   | 5 ns                                                |
| High Resolution Mode             | 12 bits when $\geq 500$ us/div (average mode ave=1) |
| Vertical Range                   | 1 mV/div to 5 V/div                                 |
| DC Vertical Gain Accuracy        | $\pm 2.0\%$ full scale                              |
| Input Resistance                 | 1 Mohm selectable                                   |
| Input Capacitance                | approximately 14 pF                                 |
| Coupling                         | ac, dc, ground                                      |
| BW Limit                         | approximately 20 MHz selectable                     |
| Maximum Input CAT I              | 300 Vrms, 400 Vpk                                   |
| Channel Isolation dc to 20 MHz   | greater than 40 dB                                  |
| Averaging                        | selectable 2 to 16383                               |
| Noise Peak to Peak               | 2% full scale or 1 mV, whichever greater            |
| Offset Range less than 10 mV/div | $\pm 5$ V                                           |
| Bandwidth                        | DC Coupled: dc to 100 MHz                           |

# 54622A Specifications

| PARAMETER                                   | VALUE                                                  |
|---------------------------------------------|--------------------------------------------------------|
| Agilent 54622A MegaZoom Oscilloscope        | Overview                                               |
| Deep memory transfer over the interface bus | Standard 10074C 10:1 probes shipped per analog channel |
| Technical Specifications                    | Analog Channels: 2 simultaneous                        |

# 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                                                                                                                                                                    |                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| Specifications                                                                                                                                                                    |                                               |
| PARAMETER                                                                                                                                                                         | VALUE                                         |
| Analog Channels                                                                                                                                                                   | 2 simultaneous                                |
| Bandwidth DC Coupled                                                                                                                                                              | dc to 100 MHz                                 |
| Bandwidth AC Coupled                                                                                                                                                              | 3.5 Hz to 100 MHz                             |
| Calculated Risetime                                                                                                                                                               | approximately 3.5 ns                          |
| Max Sample Rate                                                                                                                                                                   | 200 MSa/s                                     |
| Max Memory Depth Interleaved                                                                                                                                                      | 4 MB                                          |
| Max Memory Depth Per Channel                                                                                                                                                      | 2 MB                                          |
| Single Shot Bandwidth                                                                                                                                                             | 50 MHz                                        |
| Vertical Resolution                                                                                                                                                               | 8 bits                                        |
| Peak Detection                                                                                                                                                                    | 5 ns                                          |
| High Resolution Mode                                                                                                                                                              | 12 bits when ≥500 us/div (average mode ave=1) |
| Vertical Range                                                                                                                                                                    | 1 mV/div to 5 V/div                           |
| DC Vertical Gain Accuracy                                                                                                                                                         | ±2.0% full scale                              |
| Input Resistance                                                                                                                                                                  | 1 Mohm selectable                             |
| Input Capacitance                                                                                                                                                                 | approximately 14 pF                           |
| Coupling                                                                                                                                                                          | ac, dc, ground                                |
| BW Limit                                                                                                                                                                          | approximately 20 MHz selectable               |
| Maximum Input CAT I                                                                                                                                                               | 300 Vrms, 400 Vpk                             |
| Channel Isolation dc to 20 MHz                                                                                                                                                    | greater than 40 dB                            |
| Averaging                                                                                                                                                                         | selectable 2 to 16383                         |
| Noise Peak to Peak                                                                                                                                                                | 2% full scale or 1 mV, whichever greater      |
| Offset Range less than 10 mV/div                                                                                                                                                  | ±5 V                                          |
| Notes                                                                                                                                                                             |                                               |
| Specs from Agilent Technologies 54600-Series Oscilloscopes data sheet rows for 54622A. 1 mV/div isamagnification of 2 mV/div; use 16 mV full scale for accuracy math at 1 mV/div. |                                               |

### Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341

#### Aumictech

788 S 500 E, Pleasant Grove, UT 84062  
[sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341  
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·  
30-day returns  
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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.