


Aumictech

Test & measurement · bought, sold, repaired, calibrated

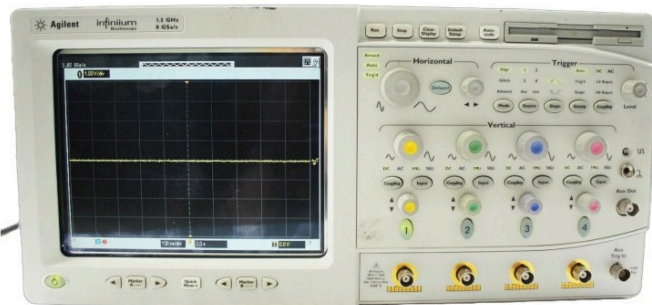
Data Sheet

August 31, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 54845A

The Agilent 54845A is the high-performance Infiniium model with 1.5 GHz bandwidth (50 ohm), up to 8 GSa/s in 2-channel mode (4 GSa/s in 4-channel mode), and up to 64K memory in 2-channel mode. OEM datasheets highlight equivalent-time sampling to 500 GSa/s effective and advanced triggers including standard runt trigger. High-speed digital and RF envelope debug, eye-diagram analysis, and capturing fast edges needing 1.5 GHz bandwidth and multi-GSa/s sampling. AutoProbe interface for intelligent probes Jitter RMS: 8 ps $\pm$ 0.005% of delay setting Minimum Pulse Width Trigger: 500 ps at greater than 1.0 div Display: 8.4 inch color active matrix LCD Specs from Agilent Infiniium 54845A data sheet columns. System bandwidth with specific probes (1152A, 1163A) differs; see probe tables on the sheet.



MODEL

**Agilent / Keysight
54845A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

54845A

LISTING

<https://aumictechlabs.com/products/54845a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 54845A is a four-channel Infiniium oscilloscope built for high-speed signal acquisition and complex waveform analysis. Operating at 1.5 GHz analog bandwidth with sample rates up to 8 GSa/s (2-channel mode) or 4 GSa/s (4-channel mode), it captures transient and periodic signals across communications, aerospace, and advanced research applications. Technical Specifications Bandwidth & Sampling Analog bandwidth: 1.5 GHz Sample rate: 8 GSa/s (2-channel mode), 4 GSa/s (4-channel mode) Memory depth (2-channel): 16 to

65,536 points (manual mode); auto mode optimizes for update rate and display quality Memory depth (4-channel): 16 to 32,768 points (manual mode) Vertical System Input impedance: 1 M Ω Maximum input voltage: ± 100 V (DC + AC, AC t or $< t$ Transition trigger: Rise/fall time measurement; captures edges as fast as 800 ps Setup/hold trigger: Supports Setup, Hold, or Setup and Hold modes (edge transitions ≥ 1.5 ns; slew rate ratio $< 2:1$) Video triggering: NTSC (525 lines/60 Hz), PAL (625 lines/50 Hz), 875 lines/60 Hz; trigger on Field 1, Field 2, or any line User-defined triggering: Configurable sync pulse level, width, polarity, and edge number Trigger sensitivity (internal, normal, DC to 100 MHz): 0.5 divisions

Key Features

Measurement & Analysis

- 16 drag-and-drop automatic measurement icons
- QuickMeas+ configurable button for four preselected measurements, QuickPrint, or QuickScreen
- Waveform math: Add, Subtract, Multiply, Divide, Invert, Magnify, Vs, Min, Max, Integrate, Differentiate, FFT Magnitude (FFT up to 1 GHz)
- Eye diagram measurements

Interface

Analog-like front panel paired with Windows-based graphical user interface. Multiple connectivity options enable remote control and data transfer.

Typical Applications

Communications, aerospace, and advanced research requiring multi-signal analysis and precise capture of fast, complex waveforms.

54845A Characteristics / Specifications

PARAMETER	VALUE
Channels	4
Analog Bandwidth 50 Ohm	1.5 GHz
Analog Bandwidth 1 Mohm	500 MHz with 1161A probe
Sample Rate 2 Channel Mode	8 GSa/s
Sample Rate 4 Channel Mode	4 GSa/s
Memory Depth 2 Channel Mode	65536 points
Memory Depth 4 Channel Mode	32768 points
Equivalent Time Effective Rate	500 GSa/s
Real Time Bandwidth 2 Channel 50 Ohm	1.5 GHz
Real Time Bandwidth 4 Channel	1.0 GHz
Rise Time 50 Ohm	233 ps
Rise Time 1 Mohm	700 ps
Vertical Sensitivity 50 Ohm	2 mV/div to 1 V/div
Input Impedance	1 Mohm $\pm 1\%$ (~12 pF) or 50 ohm $\pm 1.5\%$
VSWR 1 GHz to 1.5 GHz	1.75
Maximum Input 1 Mohm	± 100 V (dc+ac) CATIMaximum Input 50 Ohm: 5 Vrms CATIMain Time Base Range: 100 ps/div to 20 s/div
Timebase Accuracy	70 ppm
DC Gain Accuracy	$\pm 1\%$ of full scale
Jitter RMS	8 ps $\pm 0.005\%$ of delay setting
Minimum Pulse Width Trigger	500 ps at greater than 1.0 div
Display	8.4 inch color active matrix LCD
Bandwidth	50 Ohm: 1.5 GHz
Rise Time	50 Ohm: 233 ps

54845A Specifications

PARAMETER	VALUE
Agilent 54845A Infiniium Oscilloscope	Overview
Key Features	1.5 GHz bandwidth with up to 8 GSa/s
Technical Specifications	Channels: 4

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.

performance Infiniium model with 1.5 GHz bandwidth (50 ohm), up to 8 GSa/s in 2-channel mode (4 GSa/s in 4-channel mode), and up to 64K memory in 2-channel mode. OEM datasheets highlight equivalent-time sampling to 500 GSa/s effective and advanced triggers including standard runt trigger.

Applications
High-speed digital and RF envelope debug, eye-diagram analysis, and capturing fast edges needing 1.5 GHz bandwidth and multi-GSa/s sampling.

Key Features
1.5 GHz bandwidth with up to 8 GSa/s
Color-grade persistence, FFT, histograms
Standard runt violation trigger
AutoProbe interface for intelligent probes
Communication mask test options

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Channels	4
Analog Bandwidth 50 Ohm	1.5 GHz
Analog Bandwidth 1 Mohm	500 MHz with 1161A probe
Sample Rate 2 Channel Mode	8 GSa/s
Sample Rate 4 Channel Mode	4 GSa/s
Memory Depth 2 Channel Mode	65536 points
Memory Depth 4 Channel Mode	32768 points
Equivalent Time Effective Rate	500 GSa/s
Real Time Bandwidth 2 Channel 50 Ohm	1.5 GHz
Real Time Bandwidth 4 Channel	1.0 GHz
Rise Time 50 Ohm	233 ps
Rise Time 1 Mohm	700 ps
Vertical Sensitivity 50 Ohm	2 mV/div to 1 V/div
Input Impedance	1 Mohm ±1% (~12 pF) or 50 ohm ±1.5%
VSWR 1 GHz to 1.5 GHz	1.75
Maximum Input 1 Mohm	±100 V (dc+ac) CAT I
Maximum Input 50 Ohm	5 Vrms CAT I
Main Time Base Range	100 ps/div to 20 s/div
Timebase Accuracy	70 ppm

PARAMETER	VALUE
DC Gain Accuracy	±1% of full scale
Jitter RMS	8 ps ±0.005% of delay setting
Minimum Pulse Width Trigger	500 ps at greater than 1.0 div
Display	8.4 inch color active matrix LCD

Technical Specifications

PARAMETER	VALUE
Channels	4
Analog Bandwidth 50 Ohm	1.5 GHz
Analog Bandwidth 1 Mohm	500 MHz with 1161A probe
Sample Rate 2 Channel Mode	8 GSa/s
Sample Rate 4 Channel Mode	4 GSa/s
Memory Depth 2 Channel Mode	65536 points
Memory Depth 4 Channel Mode	32768 points
Equivalent Time Effective Rate	500 GSa/s
Real Time Bandwidth 2 Channel 50 Ohm	1.5 GHz
Real Time Bandwidth 4 Channel	1.0 GHz
Rise Time 50 Ohm	233 ps
Rise Time 1 Mohm	700 ps
Vertical Sensitivity 50 Ohm	2 mV/div to 1 V/div
Input Impedance	1 Mohm ±1% (~12 pF) or 50 ohm ±1.5%
VSWR 1 GHz to 1.5 GHz	1.75
Maximum Input 1 Mohm	±100 V (dc+ac) CATIMaximum Input 50 Ohm: 5 Vrms CATIMain Time Base Range: 100 ps/div to 20 s/div
Timebase Accuracy	70 ppm
DC Gain Accuracy	±1% of full scale
Jitter RMS	8 ps ±0.005% of delay setting
Minimum Pulse Width Trigger	500 ps at greater than 1.0 div
Display	8.4 inch color active matrix LCD

Notes

Specs from Agilent Infiniium 54845A data sheet columns. System bandwidth with specific probes (1152A, 1163A) differs; see probe tables on the sheet.

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

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

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 31, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.