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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 8569B MICROWAVE Signal Analyzer

Agilent Keysight 8569B Spectrum Analyzer 10 MHz to 22 GHz The HP 8569B is a preselected microwave spectrum analyzer covering 10 MHz to 22 GHz internally, extendable with external mixers to 40 GHz (optional two-band), 71 GHz (11971 mixers), or 115 GHz (commercially available mixers). OEM 8569B literature lists resolution bandwidths 100 Hz to 3 MHz in a 1-3 sequence, reference level plus 60 dBm to minus 112 dBm, 50 ohm input, plus 30 dBm maximum safe input, and frequency accuracy plus or minus 5 MHz or 0.2 percent of center frequency. The HP 8569B is a preselected microwave spectrum analyzer covering 10 MHz to 22 GHz internally, extendable with external mixers to 40 GHz (optional two-band), 71 GHz (11971 mixers), or 115 GHz (commercially available mixers). OEM 8569B literature lists resolution bandwidths 100 Hz to 3 MHz in a 1-3 sequence, reference level plus 60 dBm to minus 112 dBm, 50 ohm input, plus 30 dBm maximum safe input, and frequency accuracy plus or minus 5 MHz or 0.2 percent of center frequency. Production microwave spurious, harmonic, and spectrum monitoring; semi-automatic HP-IB trace dumps and direct plotter output.



MODEL

**Agilent / Keysight
8569B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

8569B

LISTING

<https://aumictechlabs.com/products/8569b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 8569B Microwave Signal Analyzer delivers precise RF and microwave signal analysis from 0.01 GHz to 22 GHz using its internal mixer, with external mixer capability extending measurements to 115 GHz. Built for EMI testing, signal surveillance, and microwave component characterization, this analyzer combines wide dynamic range, high sensitivity, and microprocessor-controlled operation with digital display readout for repeatable, efficient measurements.

Technical Specifications

Frequency Performance Center frequency accuracy: $\pm(5 \text{ MHz or } 0.02\% \text{ of center frequency, whichever is greater; } +20\% \text{ of Frequency Span/Div})$
Frequency span: 1.7 GHz to 22 GHz multiband sweep capability Span per division: 1 kHz to 500 MHz/div (1, 2, 5 sequence) Span accuracy (unstabilized): $\pm 5\%$ at 20 kHz to 500 MHz/div Span accuracy (stabilized): $\pm 15\%$ at 1 kHz to 100 kHz/div Total residual FM: 75 dB down at 30 kHz offset

Amplitude Specifications Measurement range: $-123 \text{ dBm to } +30 \text{ dBm}$ Input attenuation: 0 to 70 dB in 10 dB steps Step accuracy: $\leq 1.0 \text{ dB to } 18 \text{ GHz; } \leq 1.5 \text{ dB to } 22 \text{ GHz}$ Amplitude linearity (log): $< \pm 0.1 \text{ dB/dB to } \pm 1.5 \text{ dB max across } 0 \text{ to } 70 \text{ dB}$ Amplitude linearity (linear): $< \pm 3\%$ over full 8 division deflection Gain compression: $< 1 \text{ dB}$ for -7 dBm signal at 0 dB input attenuation Peak pulse power handling: $+50 \text{ dBm}$ (20 dB input attenuation) Residual responses: 10 dB input attenuation): < 1.3 (0.01–1.8 GHz); < 2.0 (1.7–22 GHz)

Key Features Internal mixer covers 0.01 GHz to 22 GHz; external mixers extend to 115 GHz Optional internal comb generator (Opt 001): $< 0.007\%$ frequency error Switchable input attenuation with 1 dB step accuracy Selectable resolution and video bandwidth for signal optimization Microprocessor control with digital display

Typical Applications EMI/RFI testing and troubleshooting Microwave component and subsystem characterization Signal surveillance and monitoring Frequency and spectral purity measurements

Compatibility & Integration External mixer support enables coverage from 12.4 GHz to 115 GHz using HP 8569B Option E02, HP 11971 series mixers, or compatible commercial mixers.

8569B Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Microwave spectrum analyzer
Series Family	HP 8569B
Frequency Range Internal	10 MHz to 22 GHz
External Mixer Optional Two Band	to 40 GHz
External Mixer 119	to 71 GHz
External Mixer Commercial	to 115 GHz
Resolution Bandwidth	100 Hz to 3 MHz, 1-3 sequence
Reference Level Range	plus 60 dBm to minus 112 dBm in 10 dB steps plus 0 to minus 12 dB vernier
Input Impedance	50 ohm nominal
Maximum Safe Input	plus 30 dBm
Frequency Accuracy	plus or minus 5 MHz or 0.2 percent of center frequency
Display	CRT monochrome with readout
Remote Interface	HP-IB
Tracking Generator	external, not included
Minimum Resolution Bandwidth	100 Hz
Documentation	HP 8569B Spectrum Analyzer Operation and Service Manual 9018-06006
Preselection	internal preselector for wide spurious-free range
Form Factor	benchtop microwave spectrum analyzer
Plotter	direct hardcopy to digital plotter without controller
Computer Access	displayed trace data and control settings via HP-IB
Operating Environment	laboratory ambient per 8569B manual
Power	AC mains operated
Weight Class	25 lb class listing on refurbished sheets
Bandwidth	100 Hz to 3 MHz, 1-3 sequence

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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Instrument Type	Microwave spectrum analyzer
Series Family	HP 8569B
Frequency Range Internal	10 MHz to 22 GHz
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External Mixer 11971	to 71 GHz
External Mixer Commercial	to 115 GHz
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Notes	
Numeric rows from HP 8569B spectrum analyzer product literature and operating-manual specification summaries	

(10 MHz-22 GHz, RBW 100 Hz-3 MHz, RL plus 60 to minus 112 dBm, plus 30 dBm max, plus or minus 5 MHz or 0.2 percent CF). Sensitivity vs band is in the 8569B specification table.

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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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.