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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 8754A

The HP/Agilent 8754A is an RF network analyzer covering 4 MHz to 1300 MHz with an integrated swept source. OEM 8754A manuals list full-band and intermediate sweep widths, crystal markers, and companion use with the 8750A storage normalizer. RF transmission and reflection measurements, component swept characterization, and educational/production RF NA benches. Companion 8750A storage normalizer support Sweep Width Maximum Class: full 4 to 1300 MHz or intermediate widths from 1000 MHz to less than 1 MHz Form Factor: benchtop Marker Type: crystal markers External Source Support: yes stabilized source path Instrument Type: RF network analyzer Documentation Source: OEM datasheet model row From HP 8754A Network Analyzer operating/specification documentation.



MODEL

**Agilent / Keysight
8754A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

8754A

LISTING

[https://aumictechlabs.c
om/products/8754a-2/](https://aumictechlabs.com/products/8754a-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 8754A is a network analyzer that characterizes RF and microwave device frequency response through simultaneous magnitude and phase measurements. The instrument integrates a swept source, tuned receiver, and CRT display into a single unit, functioning as a complete stimulus-and-response test system. Technical Specifications Frequency coverage spans 4 MHz to 1300 MHz, with optional external doubler capability extending range to 2600 MHz. Source output power reaches +10 dBm typical across a 0 to +13 dBm range, maintaining ± 0.5 dB flatness. Three receiver inputs R (reference), A, and B (test) - feed two independent measurement

channels for parallel transmission or reflection parameter acquisition. Dynamic range extends to 100 dBm, with 80 dB receiver range across both channels. Magnitude dynamic accuracy spans ± 0.3 dB from 0 to ~ 50 dBm, degrading to ± 2.5 dB near -70 to -80 dBm limits. Phase frequency response holds ± 2.5 degrees; phase range extends ± 180 degrees. Noise floor remains below -80 dBm at A and B inputs. Maximum input level tolerates 0 dBm at all receiver ports, with damage threshold at +20 dBm (50 Vdc). Spectral purity delivers -28 dBc harmonics and ≤ 7 kHz rms residual FM (10 kHz bandwidth) at +10 dBm output. Input port match exceeds 20 dB return loss (1.22 SWR equivalent). Crosstalk between channels surpasses 83 dB. Magnitude flatness (absolute) achieves ± 1 dB; ratio measurements (A/R, B/R) stay within ± 0.3 dB. Minimum R input level for phase-lock operation is -40 dBm.

Key Features CRT display with rectilinear and polar graticules; 0.25 dB and 2.5 degree per major division resolution Simultaneous S-parameter measurement: S₂₁, S₁₂, S₁₁, S₂₂ Reflection coefficient, return loss, insertion loss/gain, and insertion phase display modes Type-N female connectors (50 Ω nominal impedance) External source lock capability Programming connector (J7) for automation

Typical Applications Filter tuning and characterization, amplifier response measurement, cable insertion loss and phase testing, and general RF/microwave device impedance and gain analysis.

Compatibility & Integration Compatible with external test sets including the HP 8502A Transmission/Reflection Test Set for enhanced measurement configurations. Supports external frequency doubler extension (Option H26).

8754A Characteristics / Specifications

PARAMETER	VALUE
Model	8754A
Frequency Range	4 MHz to 1300 MHz
Sweep Width Maximum Class	full 4 to 1300 MHz or intermediate widths from 1000 MHz to less than 1 MHz
Source Impedance	50 ohm
Source Match Typical	less than 1.4 SWR (greater than 16 dB return loss)
Uncalibrated Power Range Typical	to plus 13 dBm
Harmonics Typical At Plus 10 dBm	minus 35 dBc
Spurious 4 To 500 MHz Typical	minus 75 dBc
Spurious 500 To 1300 MHz Typical	minus 60 dBc
Sweep Width Accuracy 500 To 1000 MHz Typical	plus or minus 2 percent
Sweep Width Accuracy 50 To 200 MHz Typical	plus or minus 5 percent
Sweep Width Accuracy 1 To 20 MHz Typical	plus or minus 8 percent
Stability Temperature Typical	plus or minus 400 kHz perCStability Time Typical: plus or minus 100 kHz per hour
Instrument Type	RF network analyzer
Brand Lineage	HP / Agilent
Companion Accessory	8750A storage normalizer
Form Factor	benchtopMarker Type: crystal markers
FREQUENCY MHz Display	yes
Sweep Mode FULL	4 to 1300 MHz
External Source Support	yes stabilized source pathInstrument Type: RF network analyzer
Documentation Source	OEM datasheet model row

8754A Specifications

PARAMETER	VALUE
HP Agilent 8754A Network Analyzer	Overview
Key Features	4 MHz to 1300 MHz integrated NA
Crystal marker frequency readout	Companion 8750A storage normalizer support
Technical Specifications	Model: 8754A
Notes	From HP 8754A Network Analyzer operating/specification documentation.

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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PARAMETER	VALUE
Model	8754A
Frequency Range	4 MHz to 1300 MHz
Sweep Width Maximum Class	full 4 to 1300 MHz or intermediate widths from 1000 MHz to less than 1 MHz
Source Impedance	50 ohm
Source Match Typical	less than 1.4 SWR (greater than 16 dB return loss)
Uncalibrated Power Range Typical	to plus 13 dBm
Harmonics Typical At Plus 10 dBm	minus 35 dBc
Spurious 4 To 500 MHz Typical	minus 75 dBc
Spurious 500 To 1300 MHz Typical	minus 60 dBc
Sweep Width Accuracy 500 To 1000 MHz Typical: plus or minus 2 percent	
Sweep Width Accuracy 50 To 200 MHz Typical: plus or minus 5 percent	
Sweep Width Accuracy 1 To 20 MHz Typical: plus or minus 8 percent	
Specifications	
PARAMETER	VALUE
Stability Temperature Typical	plus or minus 400 kHz perCStability Time Typical: plus or minus 100 kHz per hour
Instrument Type	RF network analyzer
Brand Lineage	HP / Agilent
Companion Accessory	8750A storage normalizer
Form Factor	benchtopMarker Type: crystal markers
FREQUENCY MHz Display	yes
Sweep Mode FULL	4 to 1300 MHz
External Source Support	yes stabilized source pathInstrument Type: RF network analyzer
Documentation Source	OEM datasheet model row
Notes	
From HP 8754A Network Analyzer operating/specification documentation.	

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.