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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 8711A

The HP/Agilent 8711A is an economy RF network analyzer with integrated synthesized source and transmission/reflection test set covering 300 kHz to 1300 MHz. OEM 8711A specification sheets list 1 Hz frequency resolution and greater than 90 dB narrowband dynamic range on 50 ohm systems. High-volume RF component manufacturing, inspection, and maintenance swept characterization with single connection. Integrated synthesized source and T/R test set Built-in 3.5 inch floppy disk drive class Maximum Input Narrowband 0.1 dB Compression: 10 dBm Maximum Input Broadband 0.1 dB Compression: 16 dBm RF Connectors Class: Type N female 50 ohm (75 ohm Option 1EC) From HP 8711A Network Analyzer specification documentation.



MODEL

**Agilent / Keysight
8711A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

8711A

LISTING

[https://aumictechlabs.c
om/products/8711a-2/](https://aumictechlabs.com/products/8711a-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 8711A is a scalar network analyzer that combines a synthesized source, transmission/reflection test set, and CRT display in a single integrated instrument. It delivers fast, accurate RF component characterization from 300 kHz to 1.3 GHz with 50 ms sweep speed and up to 100 dB system dynamic range. Built for high-volume manufacturing and production test environments, the 8711A simplifies setup through HP Instrument BASIC automation and keystroke recording while maintaining precision across gain, loss, return loss, SWR, and conversion loss measurements. Technical Specifications Frequency Range: 300 kHz to 1.3 GHz Frequency Resolution: 1 Hz Source Output Power: 0 dBm to +16 dBm Sweep Speed: 50 ms/sweep Dynamic

Range (100 dB system): Narrowband (50 Ω): >90 dB Broadband (50 Ω): >66 dB Narrowband (75 Ω): >87 dB Broadband (75 Ω): >63 dB System Impedance: 50 Ω standard; 75 Ω available (Option 1EC)

Detection Modes: Narrowband (high-rejection devices) and broadband (frequency translation devices)

Key Features

- Eight markers per channel with search, tracking, and bandwidth calculation functions
- Nine internal save/recall registers for instrument state storage
- 3.5-inch floppy disk drive (LIF/DOS format) for measurement data and IBASIC programs
- HP Instrument BASIC with keystroke recording for measurement automation
- Eight distinct measurement modes: transmission/reflection frequency response, insertion loss, gain, return loss, conversion loss, power, SWR, and delay
- HP-IB (IEEE-488) interface for instrument control and automated data transfer
- Serial and parallel interfaces for printer and plotter connectivity

Typical Applications

- RF component manufacturing and characterization
- Production-line testing of narrowband and broadband devices
- Gain and loss measurement across UHF and lower-microwave frequencies
- SWR and return loss validation in 50 Ω and 75 Ω systems

Compatibility & Integration

The 8711A pairs with IBM-compatible PCs via DOS-formatted disk storage and supports optional DIN keyboard input. Calibration standards for Type-N connectors (both 50 Ω and 75 Ω) and external detectors enable remote device measurements. Optional rack mount kit (1CM) and soft carry case (1CF) accommodate varied deployment scenarios.

Features & description

From manufacturer datasheet

Built-in 3.5 inch floppy disk drive class

HP-IB remote control Optional 60 dB attenuator Option 1E1 Technical Specifications Model: 8711A
Frequency Range: 300 kHz to 1300 MHz Frequency Resolution: 1 Hz Frequency Accuracy: less than 5 ppm Source Power Range Standard: 0 to 16 dBm Source Power Range With Attenuator: minus 60 to 13 dBm Level Accuracy Class: plus or minus 1.0 dB Harmonics: less than minus 30 dBc Spurious: less than minus 30 dBc Phase Noise Typical At 10 kHz: less than minus 67 dBc/Hz Receiver Narrowband Frequency Range: 300 kHz to 1300 MHz Receiver Broadband Frequency Range: 10 MHz to 1300 MHz Dynamic Range Narrowband 50 Ohm: greater than 90 dB Dynamic Range Broadband 50 Ohm: greater than 66 dB Maximum Input Narrowband 0.1 dB Compression: 10 dBm Maximum Input Broadband 0.1 dB Compression: 16 dBm Input Damage Level: 20 dBm Test Port Match: 20 dB System Directivity: 40 dB RF Connectors Class: TypeNfemale 50 ohm (75 ohm Option 1EC) Brand Lineage: HP / Agilent Instrument Type: RF network analyzer T/R Notes From HP 8711A Network Analyzer specification documentation.

8711A Characteristics / Specifications

PARAMETER	VALUE
Model	8711A
Frequency Range	300 kHz to 1300 MHz
Frequency Resolution	1 Hz
Frequency Accuracy	less than 5 ppm
Source Power Range Standard	0 to 16 dBm
Source Power Range With Attenuator	minus 60 to 13 dBm
Level Accuracy Class	plus or minus 1.0 dB
Harmonics	less than minus 30 dBc
Spurious	less than minus 30 dBc
Phase Noise Typical At 10 kHz	less than minus 67 dBc/Hz
Receiver Narrowband Frequency Range	300 kHz to 1300 MHz
Receiver Broadband Frequency Range	10 MHz to 1300 MHz
Dynamic Range Narrowband 50 Ohm	greater than 90 dB
Dynamic Range Broadband 50 Ohm	greater than 66 dB
Maximum Input Narrowband 0.1 dB Compression	10 dBm
Maximum Input Broadband 0.1 dB Compression	16 dBm
Input Damage Level	20 dBm
Test Port Match	20 dB
System Directivity	40 dB
RF Connectors Class	TypeNfemale 50 ohm (75 ohm Option 1EC)
Brand Lineage	HP / Agilent
Instrument Type	RF network analyzer T/R

8711A Specifications

PARAMETER	VALUE
HP Agilent 8711A RF Network Analyzer	Overview
Integrated synthesized source and T/R test set	1 Hz frequency resolution
HPIB remote control	Optional 60 dB attenuator Option 1E1
Technical Specifications	Model: 8711A
Notes	From HP 8711A Network Analyzer 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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Frequency Range	300 kHz to 1300 MHz
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Input Damage Level	20 dBm
Test Port Match	20 dB
System Directivity	40 dB
RF Connectors Class	TypeNfemale 50 ohm (75 ohm Option 1EC)
Brand Lineage	HP / Agilent
Instrument Type	RF network analyzer T/R
Notes	
From HP 8711A Network Analyzer 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.