

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 8712B

The HP/Agilent 8712B is an RF network analyzer covering 300 kHz to 1300 MHz with integrated source and test set. OEM 8711B/12B/13B/14B service documentation lists 40 dB directivity after user calibration and synthesized source performance for the 1300 MHz family. RF component production test, swept S-parameter and T/R characterization, and manufacturing maintenance. Synthesized source with 1 Hz class resolution path User calibration residual uncertainty tables Source Type: integrated synthesized source Dynamic Range Class: production RF NA class after calibration Mass Storage Class: mass storage option path per unit From HP 8711B/12B/13B/14B RF Network Analyzers service/specification documentation for 8712B.



MODEL

**Agilent / Keysight
8712B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

8712B

LISTING

[https://aumictechlabs.c
om/products/8712b-2/](https://aumictechlabs.com/products/8712b-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 8712B is an RF network analyzer that integrates a synthesized source, test set, and dual-channel display for vector measurement of RF components and networks across 300 kHz to 1.3 GHz. Purpose-built for high-volume manufacturing environments, it delivers phase, complex impedance, and linear group delay measurements with two independent display channels capable of simultaneous dual-parameter visualization. Technical Specifications Frequency Coverage and Source Performance Frequency range: 300 kHz to 1.3 GHz Frequency resolution: 1 Hz Frequency stability: ± 5 ppm (0°C to 55°C, typical) Frequency accuracy: ± 5 ppm at 25°C $\pm 5^\circ\text{C}$; < 1 Hz at 10% line voltage change Phase noise: -70 dBc/Hz at 10 kHz offset Residual

AM: ≤ -50 dBc (100 kHz bandwidth) Residual FM: <1.5 kHz peak (30 Hz to 15 kHz) Harmonic suppression: ≤ -20 dBc (<1 MHz), ≥ 1 MHz Nonharmonic spurious: ≤ -20 dBc (<1 MHz), ≤ -30 dBc (≥ 1 MHz) Power Output Output power resolution: 0.01 dB Output power level accuracy: ± 1.0 dB (standard); ± 1.5 dB (Option 1EC1); ± 2.0 dB (Option 1E1); ± 3.0 dB (Options 1EC1 and 1E1) Receiver and Display Dual independent display channels Display resolution: 0.01 dB/division (amplitude), 0.1° /division (phase) Noise floor: Specified at 15 Hz IF bandwidth, 10 dB source power, response and isolation calibration applied Measurement Formats and Capabilities Rectilinear: Log or linear magnitude, phase, group delay, SWR, real and imaginary, dBv, dBmv, dBuv (75 Ω only) Smith chart and polar formats Narrowband measurements: Reflection (A/R), Transmission (B/R), A, B, R Broadband measurements: X, Y, Y/X, X/Y, Y/R, Power (B, R), Conversion Loss (B/R) S-parameter measurement with two-port vector-error correction (ES models) Group delay measurement through frequency-translation devices (Option 1DA/1DB) Typical Applications RF component characterization, impedance analysis, transmission and reflection measurements, manufacturing test and validation, device tuner and mixer evaluation. Compatibility & Integration Synthesized source, test set, and integrated display in single platform. Vector measurement capability supports error-corrected S-parameter analysis on specified models.

8712B Characteristics / Specifications

PARAMETER	VALUE
Model	8712B
Frequency Range	300 kHz to 1300 MHz
Frequency Accuracy	5 ppm at 25 C plus or minus 5 C
Frequency Accuracy Line Sensitivity	less than 1 Hz at 10 percent line voltage change
Directivity After User Calibration	40 dB
Source Match Reflection	20 dB
Source Match Transmission	14 dB
Load Match	18 dB
Test Port Power Below 1000 MHz Standard Class	plus 16 dBm class
Test Port Power Above 1000 MHz Standard Class	plus 13 dBm / plus 10 dBm class family table
Instrument Type	RF network analyzer
Family	HP 8711B/12B 1300 MHz
Calibration Temperature Window	25 C plus or minus 5 C with less than 1 C deviation from calibration
Remote Interface	HPIB
Brand Lineage	HP / Agilent
Form Factor	benchtop RF network analyzer
Display	CRT analyzer display class
Source Type	integrated synthesized source
Test Set	integrated RF test set
Dynamic Range Class	production RF NA class after calibration
Mass Storage Class	mass storage option path per unit

8712B Specifications

PARAMETER	VALUE
HP Agilent 8712B RF Network Analyzer	Overview
Key Features	300 kHz to 1300 MHz integrated RF NA
HPIB programmable	50 ohm and 75 ohm option paths
Technical Specifications	Model: 8712B
Notes	From HP 8711B/12B/13B/14B RF Network Analyzers service/specification documentation for 8712B.

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 for the 1300 MHz family.

Applications

RF component production test, swept S-parameter and T/R characterization, and manufacturing maintenance.

Key Features

300 kHz to 1300 MHz integrated RF NA

Synthesized source with 1 Hz class resolution path

User calibration residual uncertainty tables

HPIB programmable

50 ohm and 75 ohm option paths

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	8712B
Frequency Range	300 kHz to 1300 MHz
Frequency Accuracy	5 ppm at 25 C plus or minus 5 C
Frequency Accuracy Line Sensitivity	less than 1 Hz at 10 percent line voltage change
Directivity After User Calibration	40 dB
Source Match Reflection	20 dB
Source Match Transmission	14 dB
Load Match	18 dB

Test Port Power Below 1000 MHz Standard Class: plus 16 dBm class

Test Port Power Above 1000 MHz Standard Class: plus 13 dBm / plus 10 dBm class family table

Specifications

PARAMETER	VALUE
Instrument Type	RF network analyzer
Family	HP 8711B/12B 1300 MHz
Calibration Temperature Window	25 C plus or minus 5 C with less than 1 C deviation from calibration
Remote Interface	HPIB
Brand Lineage	HP / Agilent
Form Factor	benchtop RF network analyzer
Display	CRT analyzer display class

Option Path: attenuator and 75 ohm options per familyFrequency Resolution Class: 1 Hz class synthesized source

Specifications

PARAMETER	VALUE
Source Type	integrated synthesized source
Test Set	integrated RF test set
Dynamic Range Class	production RF NA class after calibration
Mass Storage Class	mass storage option path per unit

Notes

From HP 8711B/12B/13B/14B RF Network Analyzers service/specification documentation for 8712B.

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 14, 2026

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