

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8751A

The Keysight (formerly Agilent/HP) 8751A is a high-throughput, lab-precision vector network analyzer covering the 5 Hz to 500 MHz frequency range. It is designed for characterizing the linear behavior of passive and active networks, devices, and components in both laboratory and production test environments. The instrument features excellent resolution across frequency, magnitude, phase, and time domains, and supports full 2-port and interpolative calibration.

SPECIFICATIONS

General

Interfaces	HP-IB (IEEE 488)
Display	Color CRT
Programming / Customization	Instrument BASIC
Compatible Accessories	Dedicated 50/75 Ω S-parameter test sets, 50/75 Ω T/R test kits, 1 M Ω input adaptors

Physical

Operating Temperature	0 to 55 °C
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Frequency Characteristics

Frequency Range	5 Hz - 500 MHz
Frequency Resolution	0.001 Hz

System Performance

Magnitude Resolution	0.001 dB
Phase Resolution	0.001°

Calibration and Error Correction

Calibration Methods	Full 2-port and interpolative calibration
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Source

Source Power Range	-50 dBm to +15 dBm
Source Power Resolution	0.1 dB

Receiver

Receiver Dynamic Range	100 dB
IF Bandwidths	2, 20, 200, 1k, 4k Hz
Receiver Input Ports	R, A, B

Sweep & Acquisition

Number of Points per Sweep	2 to 1601
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Inputs & Outputs

Nominal Impedance	50 Ω
Test Port Connectors	Type-N (female)
External Reference Input	10 MHz
External Reference Connector	BNC (female)
External Trigger Input	BNC (female)

Performance

Measurement Formats	Log magnitude, linear magnitude, phase, group delay, Smith chart, polar, real, imaginary
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TECHNOLOGY

Vector Network Analysis

APPLICATIONS

Baseband, IF, and RF Component Characterization

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.