

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8722D

The Keysight (formerly Hewlett-Packard / Agilent) 8722D is a high-performance microwave vector network analyzer operating from 50 MHz to 40 GHz. It integrates a fast-sweeping synthesized source, a solid-state switching S-parameter test set, and a tuned vector receiver into a single instrument. Designed to measure magnitude, phase, and group delay of RF and microwave components, it delivers up to 105 dB of dynamic range and provides powerful error correction capabilities.

SPECIFICATIONS

General

Interfaces	GPIB (IEEE-488.2), RS-232, Parallel
Display	Color CRT
Storage Media	Built-in 3.5-inch MS-DOS compatible floppy disk drive

Physical

Power Supply	90 to 132 V or 198 to 264 V (48 to 66 Hz); 90 to 132 V (400 Hz); 280 VA max
Operating Temperature	0 to 55 °C °C
Dimensions (W×H×D)	425 × 222 × 457 mm
Weight	25 kg

Frequency Characteristics

Frequency Range	50 MHz to 40 GHz
Frequency Resolution	1 Hz
Sweep Types	Linear frequency, log frequency, list frequency, CW time, power

Measurement Capabilities and Processing

Measured Parameters (S-Parameters)	S11, S21, S12, S22
Number of Measurement Channels	2 independent channels
Data Points per Sweep	11, 26, 51, 101, 201, 401, 801, 1601
Display Formats	Log magnitude, linear magnitude, phase, group delay, SWR, polar, Smith chart, real, imaginary
Calibration Methods	Response, response and isolation, 1-port, 2-port, TRL*/LRM*
Time Domain Transformation (Option)	Option 010

System Architecture

Test Set Type	Integrated solid-state switching S-parameter test set
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Test Port Input

Nominal Input Impedance	50 Ω
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Interfaces and Connectors

RF Test Port Connectors	2.4 mm (male)
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Source

Source Frequency Accuracy	±10 ppm (at 25 °C ±5 °C)
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Data Processing

Sweep Averaging	1 to 999 sweep factor
Trace Smoothing	0.1% to 20% of span

Measurement

Group Delay Aperture	Selectable from 1 point to 20% of frequency span
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Source Performance

Maximum Output Power	-5 dBm (0.05 to 20 GHz); -10 dBm (20 to 40 GHz)
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Receiver Performance

Maximum Input Level (Damage)	+20 dBm or 0 Vdc
IF Bandwidth Options	10 Hz, 30 Hz, 100 Hz, 300 Hz, 1 kHz, 3 kHz

Environmental

Storage Temperature	-40 °C to +70 °C
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Options & Upgrades

Option 012	Direct sampler access
Option 089	Frequency offset mode (for mixer testing)
Option 400	Fourth sampler / TRL calibration capability

TECHNOLOGY

Vector Network Analysis

APPLICATIONS

Microwave Component Testing

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