

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8720D

The Keysight (Agilent/HP) 8720D is a high-performance microwave vector network analyzer operating from 50 MHz to 20 GHz. Built with an integrated synthesized source, solid-state switching S-parameter test set, and a tuned vector receiver, it is designed for fast, accurate measurements of RF and microwave components. The 8720D features improved processing capabilities, making measurements and data transfers up to seven times faster than predecessor models.

SPECIFICATIONS

General

Interfaces	GPIB (IEEE-488.2), Parallel, RS-232
Display	Color CRT
Mass Storage	Internal 3.5-inch floppy disk drive (1.44 MB format)

Physical

Power Supply	90 to 132 V / 198 to 264 V, 48 to 66 Hz
Operating Temperature	0 to 55 °C
Dimensions (W×H×D)	425 × 222 × 457 mm mm
Weight	25 kg kg

Frequency Characteristics

Frequency Range	50 MHz to 20 GHz
Frequency Resolution	1 Hz
Source Signal	Built-in synthesized source
Frequency Accuracy	±10 ppm (standard)
High-Stability Frequency Reference	Option 1D5

System Dynamic Range

System Dynamic Range	Up to 105 dB
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Test Port Input Characteristics

Test Port Impedance	50 Ω
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Measurement Capabilities

Measured Parameters (S-parameters)	S11, S21, S12, S22
Number of Measurement Channels	2 independent channels
Test Set Architecture	Integrated solid-state switching S-parameter test set

Calibration Capabilities

Calibration Methods	Response, Response & Isolation, 1-Port, Full 2-Port, TRL*/LRM*
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Time Domain (Option)

Time Domain Capability	Supported (Option 010)
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Interfaces and Connectivity

Front Panel Test Port Connectors	3.5 mm (male)
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Performance

Available IF Bandwidths	10 Hz, 30 Hz, 100 Hz, 300 Hz, 1 kHz, 3 kHz
Maximum Output Power	+5 dBm (standard)
Source Harmonics	-15 dBc (typical, at maximum output power)

Source Characteristics

Power Sweep Range	20 dB
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Measurement Features

Display Formats	Log magnitude, linear magnitude, phase, group delay, SWR, Smith chart, polar
Limit Lines	Upper and lower limits with pass/fail testing
Trace Math	Vector division or subtraction of current linear data from memory data

Options

High-Power Test Set	Option 085
Frequency Offset Mode	Option 089
Fourth Receiver (TRL/LRM)	Option 400

TECHNOLOGY

Vector Network Analysis

APPLICATIONS

Microwave and RF 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.