

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8753B

The HP Keysight 8753B is a high-performance vector network analyzer designed for laboratory and production-level reflection and transmission measurements of RF components. It features an integrated synthesized RF source and a dual-channel, three-input receiver capable of measuring magnitude, phase, and group delay. With advanced digital signal processing and micro-processor controls, the 8753B provides exceptional measurement accuracy and user convenience.

SPECIFICATIONS

General

Interfaces	HP-IB (GPIB)
------------	--------------

Source Characteristics

Frequency Range	300 kHz to 3 GHz
Sweep Types	Linear, Logarithmic, Frequency List, Power Sweep

Receiver Characteristics

Number of Inputs	3 (R, A, B)
Input Impedance	50 Ω (nominal)

Measurement Functions & Display

Measured Parameters	Magnitude, Phase, Group Delay (Reflection and Transmission)
Display Channels	2 independent channels
Display Formats	Log/Linear Magnitude, Phase, Group Delay, Polar, Smith Chart, SWR
Number of Measurement Points	Up to 1601 points per sweep
Trace Math	Supported (Data/Memory, Data-Memory, etc.)
Signal Processing Features	Trace math, data averaging, trace smoothing, electrical delay

Calibration & Error Correction

Calibration Types	Response, Response/Isolation, 1-Port, 2-Port
Error Correction Algorithms	Full 1-port, Full 2-port, Interpolated, Response, Response/Isolation
Interpolated Error Correction	Supported

System Capabilities & Connectivity

Remote Programming Interface	HP-IB (GPIB)
Direct Output to Peripherals	Supported (print or plot directly without external computer)
External Storage Control	Supports compatible external disc drives
Service Diagnostics	Built-in troubleshooting and diagnostic procedures
Impedance Environments	50 ohm and 75 ohm compatibility (with compatible test sets and accessories)

Options

Option 002	Swept harmonic measurements of RF amplifiers
Option 006	Extends receiver frequency range to 6 GHz
Option 010	Frequency domain to time domain transformation
Option 908	Rack mount kit without handles
Option 913	Rack mount kit with handles

Receiver Performance

Receiver Dynamic Range	100 dB (300 kHz to 3 GHz, 10 Hz IF BW)
------------------------	--

Frequency Reference

Internal Reference Frequency	10 MHz
------------------------------	--------

Rear Panel Connections

Auxiliary Input	Rear-panel BNC (female), ± 10 V analog input
-----------------	--

TECHNOLOGY

Vector Network Analyzer

APPLICATIONS

RF and Microwave 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.