

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8510B

The HP Keysight 8510B is a high-performance microwave vector network analyzer designed to characterize the linear behavior of active and passive networks from 45 MHz to 40 GHz. Operating as a modular system, the 8510B integrates with external S-parameter test sets and synthesized RF sweepers to deliver precise vector measurements, with optional advanced time domain analysis capability.

SPECIFICATIONS

General

Interfaces	HP-IB (IEEE-488)
Display	Monochrome CRT

Physical

Weight	42 kg kg
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System Integration

Compatible S-Parameter Test Sets	HP 8514B, HP 8515A, HP 8516A
Optimized Source Models	HP 83621A (20 GHz), HP 83631A (26 GHz)
Alternative Compatible RF Sources	HP 8340 Series Synthesized Sweeper, HP 8350B Series Sweep Oscillator
Test Set Channel Architecture	Dual port architecture with a separate reference channel for each incident port

Measurement Capabilities & Calibration

Time Domain Analysis Capability	Option 010
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Hardware Interfaces & Connections

System Architecture	Two-unit configuration (HP 85101B Display Processor and HP 85102B IF/Detector)
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Measurement

Number of Points per Sweep	51, 101, 201, 401, 801
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Calibration

Calibration Types	Response, One-port, Full Two-port, One-path Two-port, TRL
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Physical Characteristics

HP 85101B Display Processor Weight	20 kg
HP 85102B IF Detector Weight	22 kg

Measurement Resolution

Magnitude Resolution	0.001 dB
Phase Resolution	0.01°

Display & Channels

Number of Display Channels	2 channels
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TECHNOLOGY

Vector Network Analysis

APPLICATIONS

Microwave and RF Component Characterization

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