

KEYSIGHT TECHNOLOGIES (AGILENT HP)

N5245B

The Keysight N5245B is a high-performance 50 GHz microwave vector network analyzer (VNA) belonging to the flagship PNA-X series. Designed as a highly integrated microwave test engine, it replaces multiple racks of equipment by combining a VNA, spectrum analyzer, noise figure analyzer, and more into a single instrument. It is widely used for advanced active device characterization, including amplifiers, mixers, and frequency converters.

SPECIFICATIONS

General

Display	12.1-inch WXGA (1280 x 800) multi-touch screen
Mass Storage	Removable Solid State Drive (SSD)
Internal Storage Type	Removable Solid State Drive (SSD)

Physical

Power Supply	100 to 240 VAC, 50/60 Hz
Operating Temperature	0 °C to +40 °C °C
Dimensions (W×H×D)	426 x 266 x 582 mm

General Specifications

Frequency Range	10 MHz to 50 GHz (900 Hz to 50 GHz with low-frequency option)
Number of Test Ports	2 or 4 ports (configuration dependent)
Test Port Connector Type	2.4 mm (male)
Impedance	50 Ω
Operating System	Windows 10

Measurement Capabilities and Options

Measurement Parameters	S-parameters, Gain Compression, Intermodulation Distortion (IMD), Noise Figure, Spectrum Analysis, Pulsed RF (option dependent)
Time Domain Analysis	Supported (option dependent)
Mixer/Converter Measurements	Supported (SMC/VMC)
Noise Figure Measurements	Supported (option dependent)
Spectrum Analysis Capability	Supported (option dependent)
Intermodulation Distortion (IMD)	Supported (option dependent)
Pulsed RF Measurements	Supported (option dependent)

Front Panel and Display

Display Type	Color LCD Multi-Touch Screen
Display Size	12.1 inch
Display Resolution	1280 x 800 (WXGA)
Touch Screen Capability	Yes (Multi-touch)

Connectivity and Interfaces

10 MHz Reference Input	BNC (female)
10 MHz Reference Output	BNC (female)
External Display Output	DisplayPort
LAN Port	10/100/1000Base-T (Gigabit Ethernet)

Connectivity

Trigger Inputs/Outputs	BNC(f)
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Capabilities

Sweep Types	Linear frequency, log frequency, CW time, power sweep, segment sweep
Measurement Formats	Log magnitude, linear magnitude, phase, unwrapped phase, group delay, Smith chart, polar, SWR, real, imaginary

Calibration

Supported Calibration Methods	SOLT, TRL, TRM, LRM, ECal, Unknown Thru
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Hardware Options

Internal Second Source	Available on 4-port models with Option 422 or 423
Internal Combiner	Available on 4-port models with Option 423

TECHNOLOGY

Vector Network Analyzer (VNA)

APPLICATIONS

Active device characterization, Amplifier/Mixer testing, Radar and pulsed RF test, Component evaluation

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