

KEYSIGHT TECHNOLOGIES (AGILENT HP)

N5247A

The Keysight (Agilent) N5247A is the 67 GHz model of the PNA-X vector network analyzer family, integrating dual internal sources, a built-in combiner, and internal signal-routing switches. It provides single-connection linear and nonlinear measurements—including S-parameters (CW and pulsed), noise figure, gain compression, IMD, harmonics, and converter tests—and supports expansion to a 2- or 4-port single-sweep mm-wave solution to 110 GHz with power leveling and true-differential capability.

SPECIFICATIONS

General

Interfaces	LAN, GPIB, USB
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Physical

Power Supply	100–240 Vac, 50/60 Hz (auto-ranging)
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RF and S-Parameter Performance

Frequency range	10 MHz – 67 GHz (model N5247A)
Number of test ports	2 or 4 (configuration dependent)
System impedance	50 Ω

Source Characteristics

Source frequency range	10 MHz – 67 GHz (per internal source)
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Second Source and Frequency Offset

Frequency-offset mode	Supported for converter measurements
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Pulsed RF and Time Domain

Time-domain transform	Time-domain analysis (option dependent)
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Calibration and Error Correction

Calibration method: SOLT	Supported
Calibration method: TRL	Supported
Calibration method: LRM/LRL	Supported
Electronic calibration (ECal)	Supported
Adapter removal/extension	Supported
Port extension	Supported
Fixture embedding/de-embedding	Supported
System verification/diagnostics	Supported

Test Ports and Test Set

Port connector type	1.85 mm (V) for 67 GHz model
Port location	Front-panel test ports

Triggering and Synchronization

10 MHz reference input	External reference input provided
10 MHz reference output	Reference output provided
Trigger sources	Internal / external / bus

Connectivity and Interfaces

LAN interface	Remote control over LAN
GPIO interface	IEEE-488 (GPIO) control
USB host ports	Front/rear USB host for storage/peripherals
External keyboard/mouse	Supported (Windows-based UI)

Software and Control

Operating system	Windows-based embedded controller
Programming interface	SCPI command set
Remote interfaces	LAN, GPIO
Driver support	VISA / IVI
Embedded apps	S-params, noise figure, gain compression, IMD, pulsed, mixers/converters
Data export	Save measurement data to files/USB storage

System Integration and Extensions

mmWave single-sweep extension	Up to 110 GHz (with external modules)
mmWave 2-/4-port capability	2- or 4-port single-sweep 110 GHz solution
mmWave power leveling	Supported with extension solution
mmWave true-differential	Differential and converter measurements supported

Options and Accessories

Test port configurations	Orderable as 2-port or 4-port
Noise figure application option	Available (license dependent)
Gain compression application option	Available (license dependent)
IMD application option	Available (license dependent)
Frequency-offset/converter option	Available (license dependent)
Time-domain application option	Available (license dependent)
ECal modules compatibility	Compatible with Keysight ECal units
Mechanical cal kits	Compatible with Keysight calibration kits
Rack mount kit	Available accessory

Physical and Power

AC line input	100–240 Vac, 50/60 Hz
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TECHNOLOGY

Vector network analyzer with dual internal sources, integrated combiner, and internal switching

APPLICATIONS

Single-connection characterization of amplifiers, mixers, and frequency converters: S-parameters (CW/pulsed), noise figure, gain compression, IMD, harmonics/spectrum, true-differential, mmWave to 110 GHz, antenna test.

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