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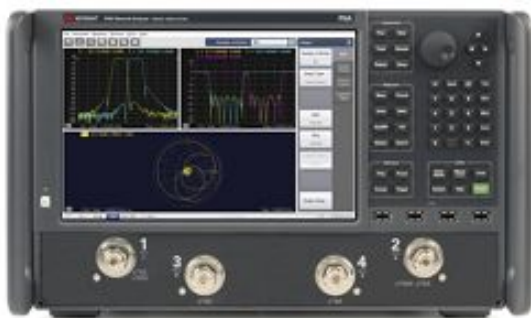
Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight N5224A 43.5 GHz PNA Microwave Network Analyzer

Agilent Keysight N5224A PNA Network Analyzer 43.5 GHz The Keysight N5224A isaPNA Series microwave vector network analyzer covering 10 MHz to 43.5 GHz. OEM PNA family configuration guides and technical specifications list 1 Hz frequency resolution and plus or minus 1 ppm frequency accuracy with 2-port and/or 4-port option architectures. S-parameter characterization of RF/microwave components across 10 MHz to 43.5 GHz, calibration with compatible kits, and R&D/production VNA measurements. High Stability Timebase Stability Class: plus or minus 0.05 ppm -10 C to 70 C class The Keysight N5224A isaPNA Series microwave vector network analyzer covering 10 MHz to 43.5 GHz. OEM PNA family configuration guides and technical specifications list 1 Hz frequency resolution and plus or minus 1 ppm frequency accuracy with 2-port and/or 4-port option architectures. S-parameter characterization of RF/microwave components across 10 MHz to 43.5 GHz, calibration with compatible kits, and R&D/production VNA measurements. High Stability Timebase Stability Class: plus or minus 0.05 ppm -10 C to 70 C class



MODEL

**Agilent / Keysight
N5224A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N5224A

LISTING

<https://aumictechlabs.com/products/n5224a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight N5224A is a 43.5 GHz PNA Microwave Network Analyzer engineered for high-accuracy S-parameter characterization of complex microwave components and systems in R&D and manufacturing environments. It delivers system dynamic range to 127 dB with receiver dynamic range up to 132 dB, enabling precise measurements across demanding test scenarios. The instrument supports 2-port single-source or 4-port dual-source configurations, each with distinct performance capabilities. Its +13 dBm output power and 38 dB power sweep range accommodate diverse component testing requirements.

Technical Specifications

Frequency Range: 10 MHz to 43.5 GHz Ports: 2-port (single source) or 4-port (two built-in sources) System Dynamic Range: Up to 127 dB Receiver Dynamic Range: Up to 132 dB Dynamic Accuracy: 0.1 dB compression at +12 dBm input power Noise Floor: -114 dBm at 10 Hz IF bandwidth Output Power: +13 dBm Power Sweep Range: 38 dB Measurement Points: 100,001 points maximum Channels: 200 channels IF Bandwidth: 15 MHz Pulsed-RF Capability: Down to 50 ns pulse widths Power Consumption: 450 watts maximum Dimensions (with feet): 11.0 in (279.1 mm) H × 19.0 in (482.9 mm) W

Key Features

Electronic and TRL/LRM calibration methods for on-wafer and fixture-corrected measurements Time-domain analysis for improved accuracy and filter characterization Frequency offset mode for mixer and amplifier distortion testing Material measurements, signal integrity analysis, and millimeter-wave characterization Transmission line, free-space, cavity, and coaxial probe measurement options Four front-panel USB ports (0.9 A limit) and five rear-panel USB ports (2.0 A limit) 10/100BaseT Ethernet connectivity Auto-switching power supply: 100–120 VAC or 220–240 VAC, 50/60/400 Hz

Typical Applications

Component S-parameter verification and characterization On-wafer and fixture-based device testing Millimeter-wave system validation Pulsed-RF component analysis Material and dielectric property measurements

Compatibility & Integration

USB 2.0 and 10/100BaseT Ethernet enable integration with automated test systems and remote control environments. Parallel port support accommodates legacy peripheral connections.

N5224A Characteristics / Specifications

PARAMETER	VALUE
Model	N5224A
Frequency Range	10 MHz to 43.5 GHz
Frequency Resolution	1 Hz
Frequency Accuracy	plus or minus 1 ppm
High Stability Timebase Stability Class	plus or minus 0.05 ppm -10 C to 70 C class
High Stability Aging Class	plus or minus 0.1 ppm/yr maximum class
Instrument Family	PNA Series
Port Options	2-port or 4-port via Option 2xx/4xx
Display	10.4 inch LCD touch screen class PNA family
Internal Storage	solid-state drive class PNA family
Remote Interfaces	USB LAN GPIB class PNA family
Test Port Impedance	50 ohm
Source Architecture	synthesized source stimulus class PNA familySPparameter Test Set: built-in integrated
IF Bandwidth Settings	per PNA firmware / OEM sheet
System Dynamic Range	banded tables in OEM technical specifications option dependent
Receiver Dynamic Range	banded tables in OEM technical specifications option dependent
Test Port Power	banded leveled power tables in OEM tech specs
Operating Temperature Spec Class	25 C plus or minus 5 C for warranted specs unless stated
Warm Up Time Class	90 minutes after turn-on for warranted specs class PNA-L sheets
Form Factor	benchtop PNA
Uncertainty Tool	Keysight NA uncertainty calculator supported
Test Port Connector Class	ruggedized 2.4 mm male
Series Family	Keysight PNA family N522x/N523x/N524x
Bandwidth	Settings: per PNA firmware / OEM sheet

PARAMETER	VALUE
Operating temperature	Spec Class: 25 C plus or minus 5 C for warranted specs unless stated

N5224A Specifications

PARAMETER	VALUE
Agilent Keysight N5224A PNA Network Analyzer 43.5 GHz	Overview
PNA Series integrated VNA architecture	10 MHz to 43.5 GHz frequency coverage
Plus or minus 1 ppm frequency accuracy	2-port or 4-port via Option 2xx/4xx
Technical Specifications	Model: N5224A

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Spec Class: 25 C plus or minus 5 C for warranted specs unless stated
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Warm Up Time Class	90 minutes after turn-on for warranted specs class PNA-L sheets
Form Factor	benchtop PNA
Uncertainty Tool	Keysight NA uncertainty calculator supported
Test Port Connector Class	ruggedized 2.4 mm male
Series Family	Keysight PNA family N522x/N523x/N524x Notes From Keysight PNA Family Microwave Network Analyzers configuration guide and model technical specifications for N5224A. Dynamic-range and power numbers are banded–use OEM tables for the installed option.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

specifications list 1 Hz frequency resolution and plus or minus 1 ppm frequency accuracy with 2-port and/or 4-port option architectures.

Applications

S-parameter characterization of RF/microwave components across 10 MHz to 43.5 GHz, calibration with compatible kits, and R&D/production VNA measurements.

Key Features

PNA Series integrated VNA architecture

10 MHz to 43.5 GHz frequency coverage

1 Hz frequency resolution

Plus or minus 1 ppm frequency accuracy

2-port or 4-port via Option 2xx/4xx

Technical Specifications

Technical Specifications

PARAMETER	VALUE
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PARAMETER	VALUE
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Uncertainty Tool	Keysight NA uncertainty calculator supported
Test Port Connector Class	ruggedized 2.4 mm male
Series Family	Keysight PNA family N522x/N523x/N524x

Notes

From Keysight PNA Family Microwave Network Analyzers configuration guide and model technical specifications for N5224A. Dynamic-range and power numbers are banded-use OEM tables for the installed option.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
30-day returns
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Generated August 14, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.