

**Aumictech**

Test &amp; measurement · bought, sold, repaired, calibrated

**Data Sheet**

August 14, 2026

AGILENT / KEYSIGHT

# Agilent / Keysight N5232B PNA-L Microwave Network Analyzer, 20 GHz

Agilent Keysight N5232B PNA-L Network Analyzer The Keysight N5232B isaPNA-L Series microwave vector network analyzer covering 300 kHz to 20 GHz. OEM N5239B/N5231B/N5232B technical specifications list 1 Hz frequency resolution,  $\pm 1$  ppm frequency accuracy, and 114 dB specified system dynamic range from 15 to 20 GHz (Option 200). Economy microwave S-parameter measurements to 20 GHz, 2-port or 4-port production test, and general RF/microwave component characterization. PNA-L integrated VNA with one synthesized source The Keysight N5232B isaPNA-L Series microwave vector network analyzer covering 300 kHz to 20 GHz. OEM N5239B/N5231B/N5232B technical specifications list 1 Hz frequency resolution,  $\pm 1$  ppm frequency accuracy, and 114 dB specified system dynamic range from 15 to 20 GHz (Option 200). Economy microwave S-parameter measurements to 20 GHz, 2-port or 4-port production test, and general RF/microwave component characterization. PNA-L integrated VNA with one synthesized source Option 216/416 extended power range with source attenuators



## MODEL

**Agilent / Keysight  
N5232B**

## CALIBRATION

**Available on  
request**

## CONDITION

**Used**

## STATUS

**In stock**

## RFQ / SKU

**N5232B**

## LISTING

<https://aumictechlabs.com/products/n5232b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

**This unit**

The Keysight N5232B PNA-L is a 20 GHz microwave network analyzer engineered for S-parameter characterization of RF and microwave components across manufacturing and R&D environments. It delivers precise measurements of passive devices, amplifiers, and frequency converters, with optional capabilities for mixed-mode analysis and nonlinear testing. The instrument balances performance and value across telecommunications, wireless LAN, aerospace, and defense applications.

**Technical Specifications**

- Frequency Range: 300 kHz to 20 GHz
- Port Configurations: 2-port or 4-port options available
- Output Power: 13 dBm
- Dynamic Range: 133 dB
- Trace Noise: 0.004 dB rms
- Harmonic Content: -18 dBc
- Display: 8.4-inch high-resolution touchscreen
- Operating System: Windows 10
- Thermal Stability: Specifications valid over 25 °C ±5 °C, 90 minutes post power-on

**Key Features**

- Single-ended and mixed-mode S-parameter measurements without balun requirements
- Differential, common, and mixed-mode performance display with common-mode rejection ratio
- Support for single-ended-to-balanced and balanced-to-balanced topologies
- Simple nonlinear testing on passive components, amplifiers, and frequency converters
- Intuitive front panel with soft keys and customizable eight-position Favorites menu
- Flexible GUI optimized for rapid component behavior analysis

**Typical Applications**

- Mobile telecommunications component validation
- Wireless LAN device characterization
- Aerospace and defense RF subsystem testing
- Active and passive component nonlinear assessment
- Differential circuit and balanced-port device analysis

**Compatibility & Integration**

Spectrum analysis options extend measurement capability to 26.5 GHz (S930902B). N-Port calibrated measurement software (S93551B) supports expanded characterization workflows. Standard accessories include calibration certificate and torque wrench for connector torque verification.

## N5232B Characteristics / Specifications

| PARAMETER                                       | VALUE                                        |
|-------------------------------------------------|----------------------------------------------|
| Model                                           | N5232B                                       |
| Instrument Type                                 | Microwave vector network analyzer            |
| Instrument Family                               | PNA-L Series                                 |
| Frequency Range                                 | 300 kHz to 20 GHz                            |
| Frequency Resolution                            | 1 Hz                                         |
| Frequency Accuracy                              | ±1 ppm                                       |
| Frequency Stability High Stability              | ±0.05 ppm, minus 10 C to 70 C                |
| Frequency Aging High Stability                  | ±0.1 ppm/yr maximum                          |
| Test Port Impedance                             | 50 ohm                                       |
| Test Port Connector                             | ruggedized 3.5 mm male                       |
| Port Options                                    | 2-port Option 200/216; 4-port Option 400/416 |
| Power Resolution                                | 0.01 dB                                      |
| Maximum Settable Power Typical                  | +30 dBm                                      |
| Minimum Settable Power Typical Standard         | minus 30 dBm, Options 200 or 400             |
| Minimum Settable Power Typical Extended         | minus 90 dBm, Options 216 or 416             |
| Maximum Leveled Power 8.5 GHz to 12.5 GHz Spec  | +10 dBm Option 200, +8 dBm Option 216        |
| Maximum Leveled Power 12.5 GHz to 20 GHz Spec   | +8 dBm Option 200, +5 dBm Option 216         |
| System Dynamic Range 12.5 GHz to 13.51 GHz Spec | 125 dB Option 200 test port                  |
| System Dynamic Range 13.51 GHz to 15 GHz Spec   | 115 dB Option 200 test port                  |
| System Dynamic Range 15 GHz to 20 GHz Spec      | 114 dB Option 200 test port                  |
| Receiver Dynamic Range Typical 15 GHz to 20 GHz | 124 dB typical, Options 200/216              |

| PARAMETER                               | VALUE                                    |
|-----------------------------------------|------------------------------------------|
| Corrected Directivity 8.5 GHz to 20 GHz | 44 dB with 85052B calibration kit        |
| If Bandwidth For Dynamic Range Tables   | 10 Hz                                    |
| Operating Temperature Spec              | 25 C ±5 C after 90 minutes warm-up       |
| Display                                 | 12.1 inch LCD touch screen               |
| Remote Interfaces                       | USB LAN GPIB class PNA-L family          |
| Form Factor                             | benchtop PNA-L                           |
| Bandwidth                               | For Dynamic Range Tables: 10 Hz          |
| Operating temperature                   | Spec: 25 C ±5 C after 90 minutes warm-up |

# General Specifications & Supplementary Characteristics

| PARAMETER                  | VALUE                                                                                                              |
|----------------------------|--------------------------------------------------------------------------------------------------------------------|
| Operating temperature      | Spec: 25 C ±5 C after 90 minutes warm-up                                                                           |
| Operating Temperature      | Spec: 25 C ±5 C after 90 minutes warm-up                                                                           |
| Operating Temperature Spec | 25 C ±5 C after 90 minutes warm-up                                                                                 |
| Display                    | 12.1 inch LCD touch screen                                                                                         |
| Remote Interfaces          | USB LAN GPIB class PNA-L family                                                                                    |
| Form Factor                | benchtop PNA-L Notes Numeric rows from Keysight N5231B/32B/39B Data Sheet and Technical Specifications 9018-04392. |

# 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,  $\pm 1$  ppm frequency accuracy, and 114 dB specified system dynamic range from 15 to 20 GHz (Option 200).

Applications

Economy microwave S-parameter measurements to 20 GHz, 2-port or 4-port production test, and general RF/microwave component characterization.

Key Features

PNA-L integrated VNA with one synthesized source

Coverage through 20 GHz on 3.5 mm ports

Option 216/416 extended power range with source attenuators

12.1 inch LCD touch screen

USB interfaces and solid-state drive

Technical Specifications

## Technical Specifications

| PARAMETER                               | VALUE                                        |
|-----------------------------------------|----------------------------------------------|
| Model                                   | N5232B                                       |
| Instrument Type                         | Microwave vector network analyzer            |
| Instrument Family                       | PNA-L Series                                 |
| Frequency Range                         | 300 kHz to 20 GHz                            |
| Frequency Resolution                    | 1 Hz                                         |
| Frequency Accuracy                      | $\pm 1$ ppm                                  |
| Frequency Stability High Stability      | $\pm 0.05$ ppm, minus 10 C to 70 C           |
| Frequency Aging High Stability          | $\pm 0.1$ ppm/yr maximum                     |
| Test Port Impedance                     | 50 ohm                                       |
| Test Port Connector                     | ruggedized 3.5 mm male                       |
| Port Options                            | 2-port Option 200/216; 4-port Option 400/416 |
| Power Resolution                        | 0.01 dB                                      |
| Maximum Settable Power Typical          | +30 dBm                                      |
| Minimum Settable Power Typical Standard | minus 30 dBm, Options 200 or 400             |
| Minimum Settable Power Typical Extended | minus 90 dBm, Options 216 or 416             |

Maximum Leveled Power 8.5 GHz to 12.5 GHz Spec: +10 dBm Option 200, +8 dBm Option 216

Maximum Leveled Power 12.5 GHz to 20 GHz Spec: +8 dBm Option 200, +5 dBm Option 216

System Dynamic Range 12.5 GHz to 13.51 GHz Spec: 125 dB Option 200 test port

System Dynamic Range 13.51 GHz to 15 GHz Spec: 115 dB Option 200 test port

System Dynamic Range 15 GHz to 20 GHz Spec: 114 dB Option 200 test port

Receiver Dynamic Range Typical 15 GHz to 20 GHz: 124 dB typical, Options 200/216

## Specifications

| PARAMETER                               | VALUE                              |
|-----------------------------------------|------------------------------------|
| Corrected Directivity 8.5 GHz to 20 GHz | 44 dB with 85052B calibration kit  |
| If Bandwidth For Dynamic Range Tables   | 10 Hz                              |
| Operating Temperature Spec              | 25 C ±5 C after 90 minutes warm-up |
| Display                                 | 12.1 inch LCD touch screen         |
| Remote Interfaces                       | USB LAN GPIB class PNA-L family    |
| Form Factor                             | benchtop PNA-L                     |

Notes  
Numeric rows from Keysight N5231B/32B/39B Data Sheet and Technical Specifications 9018-04392.

## Ordering Information

| OPTION     | DESCRIPTION                                                                            |
|------------|----------------------------------------------------------------------------------------|
| Option 216 | Maximum Leveled Power 12.5 GHz to 20 GHz Spec: +8 dBm<br>Option 200, +5 dBm Option 216 |
| Option 200 | test port                                                                              |

### Available from Aumictech

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

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

#### Aumictech

788 S 500 E, Pleasant Grove, UT 84062  
[sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341  
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·  
30-day returns  
NAICS 423690 · 811210 · 541380  
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.