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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight N5173B EXG X-Series Microwave Analog Signal Generator, 9 kHz to 40 GHz

Agilent Keysight N5173B EXG Microwave Analog Signal Generator The Keysight N5173B EXG is the microwave analog member of the EXG X-Series, extending manufacturing-oriented analog signal generation into microwave bands with the EXG control and connectivity architecture.

Microwave LO drive, upconverter stimulus, and manufacturing microwave CW/analog modulation test. Instrument Family: Keysight EXG N5173B microwave analog The Keysight N5173B EXG is the microwave analog member of the EXG X-Series, extending manufacturing-oriented analog signal generation into microwave bands with the EXG control and connectivity architecture. Microwave LO drive, upconverter stimulus, and manufacturing microwave CW/analog modulation test. Instrument Family: Keysight EXG N5173B microwave analog Frequency Resolution Class: 0.001 Hz classXSeries synthesizer



MODEL

**Agilent / Keysight
N5173B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N5173B

LISTING

[https://aumictechlabs.c
om/products/n5173b-2/](https://aumictechlabs.com/products/n5173b-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight N5173B EXG X-Series Microwave Analog Signal Generator is a configurable RF source spanning 9 kHz to 40 GHz, engineered for component characterization, receiver verification, and production testing. It delivers high-purity signals with stable output across

manufacturing and research environments, balancing performance and cost without compromise on frequency resolution or switching speed.

Technical Specifications

Frequency Performance

Frequency range: 9 kHz to 40 GHz (configurable by option: 9 kHz to 13 GHz, 9 kHz to 20 GHz, 9 kHz to 31.8 GHz, or 9 kHz to 40 GHz) Frequency resolution: 0.001 Hz Frequency switching speed in SCPI mode: typically ≤ 5 ms (options: ≤ 1.15 ms or < 1.65 ms) List/step sweep mode switching: typically ≤ 5 ms (options: ≤ 900 μ s or < 1.4 ms) Fast frequency switching option available with speeds ≥ 1.15 ms and $\pm 0.05\%$ of final frequency Reference oscillator aging: $< \pm 5 \times 10^{-10}$ per day (after 30 days) Initial frequency calibration accuracy: $\pm 4 \times 10^{-8}$ (± 40 ppb) Temperature stability: $< \pm 2 \times 10^{-8}$ from 20 to 30 °C Line voltage stability: $< \pm 1 \times 10^{-9}$ for $\pm 10\%$ change 10 MHz reference output: $\geq +4$ dBm into 50 Ω load

Amplitude Capabilities

Output power range with Option 1E1 and 1EA: +30 dBm to -130 dBm Output power range without Option 1E1 and 1EA: +19 dBm to -20 dBm Maximum output power at 20 GHz (Option 1EA): +20 dBm Amplitude resolution: 0.01 dB Level accuracy: ± 0.6 dB (9 kHz to 2 GHz, ALC on); ± 1.4 dB at -120 dBm with Option 1E1 Step attenuator (Option 1E1): 0 to 115 dB in 10 dB mechanical steps SWR: $\leq 1.7:1$ at 0 dB attenuator state up to 2 GHz; $\leq 1.4:1$ above 20 to 40 GHz Spectral Purity

Phase noise

Phase noise at 10 GHz, 20 kHz offset: -101 dBc/Hz Phase noise at 1 GHz, 20 kHz offset: -118 dBc/Hz

Key Features

External frequency reference input supported Type-N connector option (Option 1ED) available Mechanical step attenuator provides precise amplitude control Temperature-compensated operation across extended ranges

Typical Applications

Component parametric testing Receiver verification and validation Production and manufacturing test Research laboratory measurements

N5173B Characteristics / Specifications

PARAMETER	VALUE
Instrument Family	Keysight EXG N5173B microwave analog
Frequency Resolution Class	0.001 Hz classXSeries synthesizer
Amplitude Resolution Class	0.01 dB
RF Output Impedance	50 ohms nominal
Reference Output Frequency	10 MHz
Reference Output Amplitude Class	greater than or equal to plus 4 dBm nominal
Internal Reference Aging Class	less than plus or minus 1 ppm per year
Switching Speed Standard Class Typical	less than or equal to 5 ms
Switching Speed Option UNZ Class	sub millisecond class
Step Sweep Points Class	2 to 65535
List Sweep Points Class	1 to 3201
Dwell Time Range Class	100 us to 100 s
Modulation Modes	AM FM phase and pulse
Step Attenuator Class	Electronic step attenuator
Operating Temperature Spec	0 to 55 C
Remote Interfaces	GPIB LAN USB
Sweep Modes	Step and list
Form Factor	EXGXSeries benchtop chassis
Series Family	Keysight EXGXSeries signal generators
Power Options Class	Standard and Option 1EA high power paths
Connector Class	Precision microwave RF output by option
Low Frequency Coverage Class	EXG calibrated low start frequency architecture
Operating temperature	Spec: 0 to 55 C

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
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Remote Interfaces	GPIB LAN USB
Sweep Modes	Step and list
Form Factor	EXGXSeries benchtop chassis
Series Family	Keysight EXGXSeries signal generators
Power Options Class	Standard and Option 1EA high power paths
Connector Class	Precision microwave RF output by option
Low Frequency Coverage Class	EXG calibrated low start frequency architecture Notes From Keysight EXG N5173B microwave analog generator family documentation. Exact frequency ceiling and power-vs-frequency tables depend on installed options; confirm option list against OEM microwave band tables.

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