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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight N5182B MXG X-Series RF Vector Signal Generator, 9 kHz to 6 GHz

Agilent N5182B MXG X-Series Vector Signal Generator The Agilent N5182B is an MXG X-Series RF vector signal generator with frequency coverage from 9 kHz to 3 or 6 GHz depending on option. OEM MXG materials list wideband internal baseband generation, high ACPR performance, and fast frequency and amplitude switching for production wireless test. Wireless receiver testing, amplifier ACPR characterization, and general vector-modulated RF stimulus on cellular and connectivity standards. Frequency Maximum Options: 3 GHz or 6 GHz

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MODEL

**Agilent / Keysight
N5182B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N5182B

LISTING

<https://aumictechlabs.com/products/n5182b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight N5182B MXG X-Series RF Vector Signal Generator delivers signal generation across 9 kHz to 6 GHz for R&D, component testing, receiver characterization, and wireless

communications. The instrument combines exceptional spectral purity with fast frequency and amplitude switching, making it suitable for demanding modulation and signal fidelity applications.

Technical Specifications

Frequency Performance

Frequency range: 9 kHz to 6 GHz

Frequency resolution: 0.01 Hz

Frequency switching speed (CW mode, SCPI): ≤ 5 ms typical

CW switching to 0.05% of final frequency: 190 μ s measured

External reference input: 10 MHz standard, ± 1 ppm lock range

Frequency reference accuracy: $< 1 \times 10^{-10}$ nominal

Temperature stability (20–30 °C): 10 MHz–3 GHz), +16 dBm (>3–6 GHz)

Amplitude switching speed (CW mode, SCPI): ≤ 5 ms typical

Functional power range: –15 dBm to –144 dBm measured

Amplitude modulation rate: 0 to 50 kHz at 100% maximum depth

Spectral Purity

Phase noise: –146 dBc/Hz at 1 GHz, 20 kHz offset

Harmonic suppression: < -35 dBc (9 kHz–4 GHz typical), 4–6 GHz typical)

Non-harmonic spurious (CW mode): –65 dBc (9 kHz–<5 MHz), –75 dBc (5–<250 MHz), –87 dBc (250–<750 MHz)

Key Features

Fast frequency and amplitude switching for dynamic signal scenarios

Electronic step attenuator enables rapid power level control

Wide dynamic range from +30 to –144 dBm supports sensitive receiver testing

External 10 MHz reference input with ± 1 ppm lock range for system synchronization

10 MHz reference output for distribution to external equipment

Waveform marker-based power control delivers 20 μ s switching within ± 1 dB

Typical Applications

RF component characterization and validation

Receiver sensitivity and blocking performance assessment

Wireless transceiver modulation testing

Signal generation for radar and communications R&D

Compatibility & Integration

The N5182B accepts SCPI remote commands for automated test sequences and integrates with 10 MHz external frequency references (sine or square waveform, ≥ 5 dBm ± 2 dB nominal).

N5182B Characteristics / Specifications

PARAMETER	VALUE
Frequency Range Minimum	9 kHz
Frequency Maximum Options	3 GHz or 6 GHz
Instrument Type	vector signal generator
Series Family	Agilent MXG N5182B
Modulation	vector I/Q with internal ARB
Baseband Bandwidth Class	wide MXG vector BW class
Output Level Range Class	leveled MXG power range class
Level Accuracy Class	high accuracy leveled output class
Switching Speed Class	fast MXG switching class
Phase Noise Architecture	MXG LO architecture
Analog Modulation Class	AM FM PM pulse options
Pulse Modulation	available
Reference Oscillator	internal with external ref input
RF Output Connector Class	TypeNfemale
Waveform Software	Signal Studio ecosystem class
ALC Leveling	supported
Step Attenuator Option	available class
Frequency Resolution Class	fine synthesis resolution class
Remote Interfaces	LAN USB GPIB class
Form Factor	benchtop instrument
Operating Temperature Class	standard laboratory class
Calibration Interval Class	annual calibration class recommended
Power Mains Class	100 to 240 VAC class
Firmware Upgrade Path	option and firmware upgradeable class
Bandwidth	Class: wide MXG vector BW class

PARAMETER	VALUE
Operating temperature	Class: standard laboratory class

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: standard laboratory class
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Calibration Interval Class	annual calibration class recommended
Power Mains Class	100 to 240 VAC class
Firmware Upgrade Path	option and firmware upgradeable class Notes Frequency option bounds from Agilent/Keysight N5182B MXG product documentation. Confirm installed frequency and baseband options for exact modulation bandwidth and level 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.

performance, and fast frequency and amplitude switching for production wireless test.

Applications

Wireless receiver testing, amplifier ACPR characterization, and general vector-modulated RF stimulus on cellular and connectivity standards.

Key Features

MXG vector signal generator platform

Internal wideband baseband generator

Cellular and connectivity waveform packs

Fast switching for production

LAN USB GPIB remote control

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Notes
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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.