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Data Sheet

August 3, 2026

KEYSIGHT

Keysight N5182A MXG Vector Signal Generator, 100 kHz to 6 GHz

Keysight N5182A MXG Vector Signal Generator, 100 kHz to 6 GHz The Keysight N5182A MXG is a vector signal generator covering 100 kHz to 6 GHz with Option 506 (100 kHz to 3 GHz is Option 503). It provides high ACPR performance, flexible baseband/I-Q modulation, and high output power for wireless and general RF stimulus applications. Frequency resolution and spectral purity follow the N5182A datasheet. Cellular and wireless standards testing; receiver sensitivity and ACPR measurements; general-purpose vector RF stimulus from HF through 6 GHz. The Keysight N5182A MXG is a vector signal generator covering 100 kHz to 6 GHz with Option 506 (100 kHz to 3 GHz is Option 503). It provides high ACPR performance, flexible baseband/I-Q modulation, and high output power for wireless and general RF stimulus applications. Frequency resolution and spectral purity follow the N5182A datasheet. Cellular and wireless standards testing; receiver sensitivity and ACPR measurements; general-purpose vector RF stimulus from HF through 6 GHz.



MODEL

Keysight N5182A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

N5182A

LISTING

<https://aumictechlabs.com/products/n5182a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight N5182A MXG Vector Signal Generator delivers RF and microwave signal generation from 100 kHz to 6 GHz with 0.01 Hz frequency resolution. Built for component design verification

and manufacturing test of cellular and wireless connectivity devices, it combines fast switching speeds, high output power, and flexible modulation in a compact 2U form factor.

Technical Specifications

Frequency Performance Range: 100 kHz to 6 GHz across six bands (100 kHz to 6000 MHz) Resolution: 0.01 Hz External reference input: 10 MHz standard (1 to 50 MHz with Option 1ER) Lock range: ± 1 ppm Amplitude Output power: Up to +23 dBm up to 3 GHz with electronic attenuator Low power output: Down to < -110 dBm

Switching Performance SCPI mode: ≤ 1.5 ms List mode (frequency and amplitude): ≤ 5 ms List mode (frequency, amplitude, and waveform): ≤ 900 μ s

Modulation Analog: AM, FM, phase modulation Vector: ASK, FSK, MSK, PSK, QAM Pulse modulation: Available with Option UNU Digital step and list sweep with simultaneous frequency, power, and waveform switching

Baseband Generation Internal I/Q baseband generator: 100 MHz with real-time equalization Playback memory: Up to 64 MSa Storage capacity: Up to 800 MSa Supported standards: LTE, HSPA+, WiMAX, WLAN, DVB-H, DAB, MATLAB

Performance Metrics W-CDMA dynamic range: ≤ -73 dBc at +5 dBm output power ACLR: -73 dBc at +5 dBm for single-carrier W-CDMA

Key Features Six frequency bands enable optimized performance across 100 kHz to 6 GHz span Fast list-mode switching supports rapid parameter changes for manufacturing throughput Internal baseband with 64 MSa playback and 800 MSa storage for complex signal scenarios Multi-channel capability via N5106A PXB baseband generator integration Phase coherency support through LO IN/OUT connectivity

Typical Applications Cellular component design and verification Wireless transceiver characterization Standards-based signal generation (LTE, WLAN, WiMAX) Manufacturing test of RF modules and subsystems

Compatibility & Integration Interfaces: 100BaseT LAN, LXI Class-B, USB 2.0, GPIB Drivers: SCPI and IVI-COM Backward compatible with ESG, PSG, and 8648 signal generators Signal Studio software for flexible signal creation and configuration Software upgrade via license key (Option 099)

Features & description

From manufacturer datasheet

Features

- Frequency: Option 506 – 100 kHz to 6 GHz (this configuration)
- Vector (I/Q) modulation capable MXG platform
- High output power with excellent linearity (MXG family)
- Industry-competitive ACPR performance
- 10 MHz reference; standard remote interfaces per MXG

N5182A Characteristics / Specifications

PARAMETER	VALUE
Model	N5182A
Manufacturer	Keysight Technologies (Agilent)
Instrument Type	MXG Vector Signal Generator
Alias	N5182A; Agilent N5182A; MXG N5182A Frequency
Range Option 5	100 kHz to 3 GHz
Minimum Frequency	100 kHz
Frequency Bands (N)	Band 1 100 kHz to <250 MHz (N=1); additional bands per datasheet through 6 GHz Output
Maximum Reverse Power	2 W (nom), 100 kHz to 6 GHz
Max DC Voltage at RF output	50 VDC (nom)
VSWR examples (typ)	improve toward lower bands; >4–6 GHz ~1.6:1 (typ) per datasheet tables
Absolute level accuracy	band-dependent (e.g., hundreds of kHz to GHz bands typically ± 0.6 to ± 1.1 dB class—see datasheet rows) Phase Noise (CW mode examples, typ @ 20 kHz offset) 2 GHz: ≤ -115 dBc/Hz (typ) 6 GHz: ≤ -104 dBc/Hz (typ) LO (where applicable per configuration)
LO input frequency range	250 MHz to 6 GHz (nom)
LO output frequency range	250 MHz to 6 GHz (nom)
LO output power	0 dBm to +7 dBm (nom) Reference
Reference Frequency	10 MHz (standard MXG reference architecture) Operational Notes Do not confuse N5182A with N5182B (later MXG). Confirm Option 506 on the unit for 6 GHz coverage. Prefer Keysight/Agilent N5182A MXG datasheet for full power, ACPR, EVM, and modulation bandwidth tables by option.
Frequency	Option 506 – 100 kHz to 6 GHz (this configuration)
Bandwidth	tables by option.

N5182A Specifications

PARAMETER	VALUE
Key Features	- Frequency: Option 506 — 100 kHz to 6 GHz (this configuration)
Technical Specifications	Model: N5182A
Output	Maximum Reverse Power: 2 W (nom), 100 kHz to 6 GHz
LO (where applicable per configuration)	LO input frequency range: 250 MHz to 6 GHz (nom)
Reference	Reference Frequency: 10 MHz (standard MXG reference architecture)

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, flexible baseband/I-Q modulation, and high output power for wireless and general RF stimulus applications. Frequency resolution and spectral purity follow the N5182A datasheet.

Applications

Cellular and wireless standards testing; receiver sensitivity and ACPR measurements; general-purpose vector RF stimulus from HF through 6 GHz.

Key Features

- Frequency: Option 506 – 100 kHz to 6 GHz (this configuration)
- Vector (I/Q) modulation capable MXG platform
- High output power with excellent linearity (MXG family)
- Industry-competitive ACPR performance
- 10 MHz reference; standard remote interfaces per MXG

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	N5182A
Manufacturer	Keysight Technologies (Agilent)
Instrument Type	MXG Vector Signal Generator
Alias	N5182A; Agilent N5182A; MXG N5182A

Frequency

Frequency

PARAMETER	VALUE
Range Option 503	100 kHz to 3 GHz
Range Option 506	100 kHz to 6 GHz
Minimum Frequency	100 kHz
Frequency Bands (N)	Band 1 100 kHz to <250 MHz (N=1); additional bands per datasheet through 6 GHz

Output

Specifications

PARAMETER	VALUE
Maximum Reverse Power	2 W (nom), 100 kHz to 6 GHz
Max DC Voltage at RF output	50 VDC (nom)
VSWR examples (typ)	improve toward lower bands; >4–6 GHz ~1.6:1 (typ) per datasheet tables

PARAMETER	VALUE
Absolute level accuracy	band-dependent (e.g., hundreds of kHz to GHz bands typically ± 0.6 to ± 1.1 dB class—see datasheet rows)

Phase Noise (CW mode examples, typ @ 20 kHz offset)

2 GHz: ≤ -115 dBc/Hz (typ)

6 GHz: ≤ -104 dBc/Hz (typ)

L0 (where applicable per configuration)

Specifications

PARAMETER	VALUE
L0 input frequency range	250 MHz to 6 GHz (nom)
L0 output frequency range	250 MHz to 6 GHz (nom)
L0 output power	0 dBm to +7 dBm (nom)

Reference

Reference Frequency: 10 MHz (standard MXG reference architecture)

Operational Notes

Do not confuse N5182A with N5182B (later MXG). Confirm Option 506 on the unit for 6 GHz coverage. Prefer Keysight/Agilent N5182A MXG datasheet for full power, ACPR, EVM, and modulation bandwidth tables by option.

Ordering Information

OPTION	DESCRIPTION
Option 506	(100 kHz to 3 GHz is Option 503). It provides high ACPR performance, flexible baseband/I-Q modulation, and high output power for wireless and general RF stimulu

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

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NIST-traceable calibration · SAM registered ·
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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.