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Data Sheet
August 12, 2026

KEYSIGHT / AGILENT

Keysight (Agilent) N5186A MXG Vector Signal Generator

Keysight / Agilent N5186A MXG Vector Signal Generator The N5186A isamodern MXG vector signal generator with multi-channel capable architecture. Frequency options to 3 / 6 / 8.5 GHz; RF modulation bandwidth options to 960 MHz; optional high output power and low phase noise. The N5186A isamodern MXG vector signal generator with multi-channel capable architecture. Frequency options to 3 / 6 / 8.5 GHz; RF modulation bandwidth options to 960 MHz; optional high output power and low phase noise.

MODEL **Keysight / Agilent N5186A**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **N5186A**	LISTING **https://aumictechlabs.com/products/n5186a-2/**

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight N5186A MXG is a multichannel vector signal generator engineered for wireless communications, aerospace, and defense test applications. It delivers complex signal generation with support for advanced modulation schemes including MIMO, beamforming, and multiplexing. The instrument configures from 1 to 4 unique output channels in a compact 2U form factor, minimizing rack space while reducing external connections.Custom DAC ASICs employing direct digital synthesis (DDS) produce signals with minimized distortion across demanding component and receiver test scenarios.Technical Specifications Frequency Range: 9 kHz to 8.5 GHz (configurable models at 3 GHz, 6 GHz, and 8.5 GHz) Frequency Resolution: 1×10^{-5} Hz Modulation

Bandwidth: Up to 960 MHz per channel (options: 250 MHz, 500 MHz, 960 MHz) Output Power: +27 dBm measured; settable from +20 dBm to −135 dBm (standard) or +30 dBm to −135 dBm with Option 1EA Phase Noise: −147 dBc/Hz @ 1 GHz (20 kHz offset); −146 dBc/Hz @ 1 GHz (10 kHz offset) Harmonics @ 1 GHz: −35 dBc measured Non-Harmonics @ 1 GHz: −80 dBc to −85 dBc measured Frequency Switching Speed: 800 µs typical (fast switching via Option UNZ) Waveform Memory: 512 MSa (M05), 1 GSa (M10), 2 GSa (M20), or 2048 MSa options Power Consumption: 270 W nominal / 650 W max (1 channel); 380 W nominal / 650 W max (2 channels); 550 W nominal / 650 W max (4 channels) AC Power Input: 100/120 VAC or 220/240 VAC, 50/60/400 HzKey Features Configurable 1 to 4 independent output channels Built-in reflectometer option (N5186A-V08) covering 9 kHz to 8.5 GHz Low and enhanced low phase noise options (N5186A-EP3 or N5186A-EP4) Baseband generator mode with waveform playback capability EVM and ACPR performanceTypical Applications Wireless communications component and receiver validation MIMO and beamforming signal simulation Aerospace and defense system testing Multi-channel signal multiplexing and protocol verification

Features & description

From manufacturer datasheet

Features

• Frequency options: 9 kHz–3 GHz (503); 9 kHz–6 GHz (506); 9 kHz–8.5 GHz (508) • RF bandwidth options: 250 MHz (B2X); 500 MHz (B5X); 960 MHz (B9X) with 256 MSa base • Memory upgrades: 512 MSa / 1 GSa / 2 GSa (M05/M10/M20) • Max output power (std): +18 dBm class 10 MHz–8.5 GHz • Max output with Opt 1EA: up to +25 dBm (10 MHz–<5 GHz typ. table) • Phase noise options: EP3 low / EP4 enhanced low • Baseband: 16-bit I/Q; interpolated I/Q rate 1.2 GHz class; attenuation 0 to −100 dB • Vector features: AWGN/CW interferer Opt 403 • Correction: S-parameter / fixture characterization 10 MHz–8.5 GHz; ECal N469xD / N755x compatible • Ref in: 10 MHz (Opt 1ER: 1–110 MHz); Ref out ~+3.9 dBm

Applications

• Wideband wireless signal generation • Multi-channel MIMO / interferer testing • Fixture/DUT match correction with compatible ECal kits

N5186A Characteristics / Specifications

PARAMETER	VALUE
Model	N5186A
Manufacturer	Keysight / Agilent
Instrument Type	MXG Vector Signal Generator
Alias	N5186A; Keysight N5186A; MXG N5186A
Frequency max option	8.5 GHz
Frequency min	9 kHz
RF bandwidth max option	960 MHz
Base memory	256 MSa
Max power std class	+18 dBm
Max power Opt 1EA class	+25 dBm Notes Specs from Keysight N5186A MXG data sheet / configuration guide. Exact frequency, bandwidth, and channel count depend on installed options–confirm option list on the unit.
Frequency options	9 kHz–3 GHz (503); 9 kHz–6 GHz (506); 9 kHz–8.5 GHz (508)
RF bandwidth options	250 MHz (B2X); 500 MHz (B5X); 960 MHz (B9X) with 256 MSa base
Memory upgrades	512 MSa / 1 GSa / 2 GSa (M05/M10/M20)
Max output power (std)	+18 dBm class 10 MHz–8.5 GHz
Max output with Opt 1EA	up to +25 dBm (10 MHz–<5 GHz typ. table)
Phase noise options	EP3 low / EP4 enhanced low
Baseband	16-bit I/Q; interpolated I/Q rate 1.2 GHz class; attenuation 0 to −100 dB
Vector features	AWGN/CW interferer Opt 403
Correction	S-parameter / fixture characterization 10 MHz–8.5 GHz; ECal N469xD / N755x compatible
Ref in	10 MHz (Opt 1ER: 1–110 MHz); Ref out ~+3.9 dBm
Bandwidth	options to 960 MHz; optional high output power and low phase noise.
Attenuation	0 to −100 dB - Vector features: AWGN/CW interferer Opt 403

N5186A Specifications

PARAMETER	VALUE
Keysight / Agilent N5186A MXG Vector Signal Generator	Overview
Key Features	- Frequency options: 9 kHz–3 GHz (503); 9 kHz–6 GHz (506); 9 kHz–8.5 GHz (508)
Technical Specifications	Model: N5186A

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

Specifications

PARAMETER	VALUE
Model	N5186A
Manufacturer	Keysight / Agilent
Instrument Type	MXG Vector Signal Generator
Alias	N5186A; Keysight N5186A; MXG N5186A

Specifications

PARAMETER	VALUE
Frequency max option	8.5 GHz
Frequency min	9 kHz
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Base memory	256 MSa
Max power std class	+18 dBm
Max power Opt 1EA class	+25 dBm

Notes
Specs from Keysight N5186A MXG data sheet / configuration guide. Exact frequency, bandwidth, and channel count depend on installed options–confirm option list on the unit.

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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