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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 5183A

Agilent N5183A MXG Microwave Analog Signal Generator The Agilent N5183A MXG is the microwave analog member of the MXG A-series, extending synthesized CW and analog modulation into microwave bands beyond the RF-only N5181A. OEM MXG documentation positions N5183A for microwave component and LO stimulus with the same compact MXG architecture. Microwave LO and stimulus generation, upconverter drive, and general-purpose analog-modulated microwave signal generation in R&D and manufacturing. Microwave frequency coverage beyond RF MXG The Agilent N5183A MXG is the microwave analog member of the MXG A-series, extending synthesized CW and analog modulation into microwave bands beyond the RF-only N5181A. OEM MXG documentation positions N5183A for microwave component and LO stimulus with the same compact MXG architecture. Microwave LO and stimulus generation, upconverter drive, and general-purpose analog-modulated microwave signal generation in R&D and manufacturing. Microwave frequency coverage beyond RF MXG Instrument Family: Agilent MXG N5183A microwave analog



MODEL

**Agilent / Keysight
5183A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

5183A

LISTING

<https://aumictechlabs.com/products/5183a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight N5183A MXG is a microwave analog signal generator delivering precision RF synthesis across multiple frequency bands. It combines fast frequency switching, low phase noise, and flexible modulation to support calibration, metrology, and device characterization from

100 kHz to 40 GHz. Technical Specifications Frequency Performance Frequency range: 100 kHz to 20 GHz (Option 520), 100 kHz to 31.8 GHz (Option 532), or 100 kHz to 40 GHz (Option 540) Frequency resolution: 0.01 Hz Frequency switching speed: $\leq 900 \mu\text{s}$ ($\leq 600 \mu\text{s}$ typical) Fast switching available via Option UNZ Output Power Maximum output power: +18 dBm at 20 GHz; +19 dBm typical Power range at 1 GHz: -130 dBm to +18 dBm High power option available (Option 1EA) Leveling modes: Internal, external detector, ALC off, search SWR: 1.6:1 typical from 100 kHz to 20 GHz Spectral Purity Phase noise: $\leq -116 \text{ dBc/Hz}$ at 20 kHz offset (typical); -107 dBc/Hz typical at 20 kHz offset from 3 GHz carrier Non-harmonic spurious: $\leq 70 \text{ dBc}$ at 1 GHz Modulation AM, FM, phase modulation, and pulse modulation FM maximum deviation: 10 MHz at 1 GHz FM modulation rate: DC to 7 MHz at 100 kHz deviation Phase modulation deviation: 1.25 rad to 160 rad Pulse characteristics: $< 10 \text{ ns}$ rise/fall time, 20 ns pulse widths Simultaneous modulation supported (FM and phase modulation excluded) Modulation options: Analog (Option UNT), pulse (Option UNU), narrow pulse (Option UNW), pulse train generator (Option 320) Sweep modes: Digital and step Thermal Stability Level accuracy within $\pm$ tolerance from -20 dBm to maximum output power at 15–35 °C Temperature coefficient: 0.01 dB/°C (typical) outside 20–30 °C Frequency-dependent drift above 4.5 GHz Key Features Multiple frequency options to 40 GHz Sub-microsecond frequency switching Wide dynamic range: -130 dBm to +18 dBm Low phase noise suitable for sensitive receiver testing Internal and external leveling control Pulse modulation with $< 10 \text{ ns}$ edge rates Typical Applications Component and subsystem characterization Receiver sensitivity measurement Phase noise analysis Pulse-modulated system testing Frequency conversion verification Compatibility & Integration Connector options include standard waveguide transitions and Type-N connectors (Option 1ED). External power meter integration via detector leveling enables closed-loop amplitude control.

5183A Characteristics / Specifications

PARAMETER	VALUE
Instrument Family	Agilent MXG N5183A microwave analog
Frequency Resolution Class	0.01 Hz class MXG 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 Nominal Class	less than plus or minus 1 ppm per year
Temperature Effects Nominal Class	plus or minus 1 ppm 0 to 55 C
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
Form Factor Height Class	2U class 89 mm MXG chassis
Remote Interfaces	GPIB LAN USB
Sweep Modes	Step and list frequency amplitude
Connector Class	Precision microwave RF output by option
Series Family	Agilent MXGAseries signal generators
Power Options Class	Standard and high power option paths
Operating temperature	Spec: 0 to 55 C

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Spec: 0 to 55 C
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Form Factor Height Class	2U class 89 mm MXG chassis
Remote Interfaces	GPIB LAN USB
Sweep Modes	Step and list frequency amplitude
Connector Class	Precision microwave RF output by option
Series Family	Agilent MXGAseries signal generators
Power Options Class	Standard and high power option paths Notes From Agilent/Keysight N5183A MXG microwave analog generator family documentation. Exact maximum frequency and power vs frequency depend on installed options; use the unit option list and OEM band tables for quoting limits.

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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Switching Speed Standard Class Typical	less than or equal to 5 ms
Switching Speed Option UNZ Class	sub millisecond class
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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.