



Agilent N5183A MXG **Microwave** **Analog Signal Generator**

Microwave Signal Generation Optimized for Manufacturing

- 100 kHz to 20, 31.8, or 40 GHz frequency range
- +18 dBm output power to overcome system test losses
- $\leq 900 \mu\text{s}$ frequency switching speed for increased measurement throughput
- High reliability and easy self-maintenance lower your cost of ownership



Agilent Technologies

MXG Microwave Analog Signal Generator

The N5183A MXG delivers the performance you require for a wide variety of broadband measurements in a compact, 2U-high package, making it a particularly useful tool for microwave component and system manufacturing test applications, including LO substitution, traveling wave tube amplifier (TWTA) tests, and antenna measurements.

Power to overcome system losses

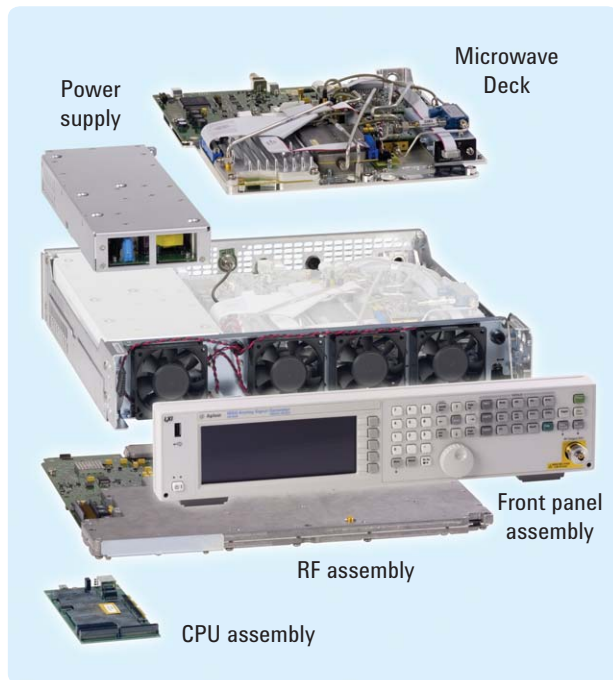
Every microwave engineer knows that as frequencies go up, so do power losses through cables, switches, filters, and other components in your test system. The MXG provides +18 dBm to 20 GHz to overcome those losses and provide adequate power to your device.

Increase throughput

Demanding schedules require that modern test systems deliver high measurement throughput. The N5183A MXG delivers a fast, reliable stimulus with frequency switching speeds of $\leq 900 \mu\text{s}$ ($\leq 600 \mu\text{s}$ typical) and amplitude switching speeds of $\leq 5 \text{ ms}$ ($\leq 2 \text{ ms}$ typical) in digital step sweep mode.

Lower cost of ownership

Every element of the N5183A MXG is designed to maximize uptime and reduce your cost of ownership, from a simplified design that delivers high reliability to cost- and time-effective tools for easy self-maintenance. The MXG has 100% internal diagnostic capability and is composed of five easily replaceable, pre-calibrated assemblies that minimize any potential downtime to less than 1 working day.



The N5183A MXG is easy to self-maintain – any of the five major assemblies can be replaced in less than one working day.

Extensive code compatibility

The MXG enables you to extend the life of your automated test systems without losing your significant investment in software. With compatibility languages for the following signal generators, the MXG makes it easy to refresh your existing test systems:

HP/Agilent Sources

- 8340 Series
- 8370 Series
- ESG
- 8360 Series
- 8662A/8663A
- PSG

Other Manufacturers' Sources

- R&S SMR Series
- Anritsu MG3690 Series

Specification summary

Specifications subject to change without notice. For complete specifications refer to the Data Sheet, literature number 5989-7572EN.

Output power (with option 1EA)

20 GHz	+18 dBm
40 GHz	+12 dBm

Absolute level accuracy

	-20 to -10 dBm	-10 to +10 dBm	> +10 dBm
250 kHz to 2 GHz	$\pm 1.4 \text{ dB}$	$\pm 0.6 \text{ dB}$	$\pm 0.6 \text{ dB}$
2 to 20 GHz	$\pm 1.3 \text{ dB}$	$\pm 0.9 \text{ dB}$	$\pm 0.9 \text{ dB}$
20 to 40 GHz	$\pm 1.3 \text{ dB}$	$\pm 0.9 \text{ dB}$	$\pm 1.0 \text{ dB}$

Single sideband phase noise (at 20 kHz offset)

1 GHz	-113 dBc/Hz (-116 typical)
10 GHz	-95 dBc/Hz (-98 typical)
20 GHz	-89 dBc/Hz (-92 typical)
40 GHz	-83 dBc/Hz (-86 typical)

Harmonics

250 kHz to 2 GHz	-28 dBc (-30 typical)
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Remove all doubt

Your equipment restored to like new performance, returned on time



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