

KEYSIGHT TECHNOLOGIES (AGILENT HP)

N9310A

The Keysight N9310A (formerly Agilent N9310A) is a 9 kHz to 3 GHz RF signal generator designed for electronic manufacturing, R&D, and service tests. Ideal for entry-level RF testing of consumer wireless devices, cordless phones, GPS receivers, and RFID/WLAN modules, it features robust analog modulations, an optional 40 MHz bandwidth I/Q modulator, and standard USB connectivity for simplified automated control via SCPI commands.

SPECIFICATIONS

Frequency

Minimum Frequency	9 kHz Hz
Maximum Frequency	3 GHz Hz
Frequency Resolution	0.1 Hz

Output

Maximum Output Power	+13 dBm dBm
Output Power Range	-127 dBm to +13 dBm
Phase Noise	<-95 dBc/Hz (typically -98 dBc/Hz) at 20 kHz offset, 1 GHz carrier

General

Reference Oscillator	10 MHz (aging rate < $\pm 1 \times 10^{-6}$ /year)
Display	6.5-inch TFT color LCD, 640 x 480 resolution

Physical

Power Supply	100 to 240 V AC, 50 to 60 Hz, automatic selection
Dimensions (W×H×D)	320 mm x 132.5 mm x 400 mm mm
Weight	9.2 kg kg

Frequency Specifications

External Reference Input Frequency	10 MHz
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Amplitude Specifications

Amplitude Resolution	0.1 dB
Output Impedance	50 ohms

Analog Modulation

AM Modulation Depth Range	0 to 100%
AM Depth Resolution	0.1%

Inputs and Outputs

RF Output Connector	Type-N female, 50 ohms
Internal LF Output Connector	BNC female (front panel)
External Modulation Input Connector	BNC female (front panel)
10 MHz Reference Input Connector	BNC female (rear panel)
10 MHz Reference Output Connector	BNC female (rear panel)

Connectivity and Remote Control

Remote Command Compatibility	SCPI standard
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Environmental and Compliance

Calibration Interval	1 year
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General Specifications

Warm-Up Time	45 minutes
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I/Q Modulation (Option 001)

I/Q Full Scale Input Voltage	0.5 Vrms for $\sqrt{I^2 + Q^2}$
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Trigger & Sweep Outputs

Sweep Output Voltage Range	0 to 10 V
Trigger Input Level	TTL compatible
Trigger Input Impedance	> 10 kΩ

Reference Oscillator

10 MHz Reference Output Amplitude	≥ 0 dBm
10 MHz Reference Output Impedance	50 Ω nominal

Power Supply

AC Input Voltage Range	100 to 240 VAC
AC Input Frequency Range	50 to 60 Hz

TECHNOLOGY

Solid State RF Synthesizer

APPLICATIONS

Electronic Manufacturing Testing, RF Education, and Consumer Electronics R&D

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.