

KEYSIGHT TECHNOLOGIES (AGILENT HP)

N9000B

The Keysight N9000B CXA is a versatile, essential signal and spectrum analyzer in the X-Series platform. Designed for general-purpose testing, IoT device characterization, and education, it provides solid RF performance and multi-touch operability for fundamental signal characterization from 9 kHz up to 26.5 GHz.

SPECIFICATIONS

General

Interfaces	1000Base-T LAN, USB 2.0 / USB 3.0, GPIB (IEEE-488)
Display	10.6-inch capacitive multi-touch screen
Warm-Up Time	5 minutes
Recommended Calibration Cycle	1 year

Physical

Power Supply	100 to 240 V at 50/60 Hz; 100 to 120 V at 400 Hz; 270 W maximum
Operating Temperature	0 to 50 °C °C
Dimensions (W×H×D)	426 × 177 × 368 mm
Weight	15.4 kg (net) kg

Frequency Specifications

Frequency Range	9 kHz to 3.0 GHz, 7.5 GHz, 13.6 GHz, or 26.5 GHz (option dependent)
Frequency Reference Aging Rate	$\pm 1 \times 10^{-6}$ / year (standard); $\pm 1 \times 10^{-7}$ / year (Option PFR)

Bandwidth Specifications

Analysis Bandwidth (Standard)	10 MHz
Analysis Bandwidth (Maximum / Option)	25 MHz (Option B25)

Amplitude Accuracy and Range

Maximum Safe Input Level (Average Total Power)	+30 dBm (1 W)
Maximum DC Input Voltage	± 50 VDC
Input Attenuation Range	0 to 50 dB (10 dB steps standard, 2 dB steps with Option FSA)

Dynamic Range and Noise Performance

Phase Noise (10 kHz offset)	-110 dBc/Hz @ 1 GHz (typical)
Displayed Average Noise Level (DANL) - Preamp On	-163 dBm @ 1 GHz (typical)
Third-Order Intercept (TOI)	+17 dBm @ 1 GHz (typical)

Inputs and Outputs

RF Input Impedance	50 Ω (nominal)
RF Input Connector Type	Type-N (female), 50 Ω
10 MHz Reference Input Connector	BNC (female)
10 MHz Reference Output Connector	BNC (female)
Trigger Input / Output Connector	BNC (female)

General and Environmental

Operating System	Windows 10
Internal Data Storage	Removable Solid State Drive (SSD)

Sweep

Sweep Points	1 to 100,001
Sweep Time (Span > 0 Hz)	1 ms to 4000 s
Sweep Time (Zero Span)	1 μ s to 6000 s

Performance

Trace Detectors	Normal, Peak, Sample, Negative Peak, Log Power Average, RMS Average, Voltage Average
Video Bandwidth (VBW)	1 Hz to 3 MHz (10% steps), 4, 5, 6, 8 MHz
Displayed Average Noise Level (DANL) - Preamp Off	-147 dBm/Hz (typical @ 1 GHz)

Inputs & Outputs

Input Attenuation Step Size	10 dB steps (Standard), 2 dB steps (with Option FSA)
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Configuration Options

Preamplifier Options	3 GHz, 7.5 GHz, 13.6 GHz, 26.5 GHz (Options P03, P07, P13, P26)
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Frequency

Frequency Options	9 kHz to 3.0, 7.5, 13.6, or 26.5 GHz (Options 503, 507, 513, 526)
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Environmental

Storage Temperature	-40 to 70 $^{\circ}$ C
Maximum Operating Altitude	4,600 m

Compliance

Safety Compliance	IEC/EN 61010-1
EMC Compliance	IEC/EN 61326-1, CISPR 11

TECHNOLOGY

Signal Analyzer / Spectrum Analyzer

APPLICATIONS

General-purpose RF test, IoT validation, consumer electronics, and educational laboratories

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