

KEYSIGHT TECHNOLOGIES (AGILENT HP)

N9010B

The Keysight N9010B EXA is a versatile X-Series signal analyzer that provides excellent general-purpose spectrum analysis and a broad range of application-specific measurements. Equipped with a multi-touch interface, it offers standard analysis bandwidth of 25 MHz (upgradeable to 40 MHz) and frequency coverage from 10 Hz up to 44 GHz, depending on configuration.

SPECIFICATIONS

General

Interfaces	USB 2.0 / 3.0, LAN (1000Base-T LXI), GPIB (IEEE-488)
Display	10.6-inch capacitive multi-touch screen

Physical

Power Supply	100-240 V, 50/60 Hz; 100-120 V, 400 Hz
Operating Temperature	0 to 55 °C
Dimensions (W×H×D)	426 × 177 × 368 mm
Weight	16.0 kg (nominal, without options) kg

Frequency Specifications

Frequency Range	10 Hz to 3.6, 7.0, 13.6, 26.5, 32, or 44 GHz (by option)
Frequency Options	Opt 503 (3.6 GHz), 507 (7.0 GHz), 513 (13.6 GHz), 526 (26.5 GHz), 532 (32 GHz), 544 (44 GHz)
Resolution Bandwidth (RBW)	1 Hz to 3 MHz (10% steps), 4, 5, 6, 8 MHz
Sweep Points	1 to 100,001

Amplitude Specifications

Absolute Amplitude Accuracy	± 0.27 dB
Maximum Safe Input Power	+30 dBm (1 W)

Dynamic Range and Noise

Phase Noise (10 kHz offset)	-109 dBc/Hz @ 1 GHz (typical)
Displayed Average Noise Level (DANL)	-150 dBm/Hz @ 1 GHz (without preamp, typical)
DANL with Preamplifier	-163 dBm/Hz @ 1 GHz (typical)
Third-Order Intermodulation (TOI)	+19 dBm @ 1 GHz

Analysis Bandwidth

Standard Analysis Bandwidth	25 MHz
Maximum Upgradeable Analysis Bandwidth	40 MHz (Option B40)

Inputs, Outputs and Interfaces

RF Input Impedance	50 Ω
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Software and System

Operating System	Windows 10 Embedded
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Display and System

Data Storage	Removable Solid State Drive (SSD)
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Inputs & Outputs

Mechanical Attenuator Range	0 to 60 dB (2 dB steps)
Electronic Attenuator Range	0 to 24 dB in 1 dB steps (Option EA3)
RF Input Connector (up to 26.5 GHz)	Type-N female, 50 Ω (standard for lower frequency options)
RF Input Connector (32 GHz & 44 GHz)	2.4 mm male, 50 Ω (configuration dependent)

Performance

Sweep Time Range	1 μ s to 6000 s
Trigger Sources	Free run, line, video, external 1, external 2, RF burst, periodic timer
Amplitude Measurement Range	Displayed Average Noise Level (DANL) to +30 dBm
Video Bandwidth (VBW)	1 Hz to 3 MHz (10% steps), 4, 5, 6, 8 MHz, and wide open
Mechanical Attenuator Step Size	2 dB steps
Electronic Attenuator Step Size	1 dB steps

Measurement & Analysis

Trace Detectors	Normal, Peak, Sample, Negative Peak, Log power average, RMS average, Voltage average
EMI Detectors	CISPR Peak, Quasi-peak, EMI Average, RMS Average
Preselector Bands	Utilized above 3.6 GHz (configuration dependent)

Compliance

LXI Compliance	LXI Core 2011 compliant (Version 1.4)
Safety Compliance	IEC/EN 61010-1, CAN/CSA-C22.2 No. 61010-1
EMC Compliance	CISPR 11 / EN 55011 (Group 1, Class A), IEC/EN 61326-1, IEC/EN 61326-2-1

Environmental

Operating Altitude	Up to 4,600 m (15,092 ft)
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TECHNOLOGY

Signal/Spectrum Analyzer

APPLICATIONS

General-purpose spectrum analysis, component characterization, and cellular/wireless connectivity testing

