

KEYSIGHT TECHNOLOGIES (AGILENT HP)

N9020B

The Keysight N9020B MXA is a high-performance, mid-range X-Series signal analyzer designed for fast, accurate RF and microwave measurements. It features a multi-touch interface and provides highly configurable frequency ranges, wide analysis bandwidth, and industry-leading phase noise performance for characterizing complex wireless signals in R&D and manufacturing environments.

SPECIFICATIONS

General

Interfaces	LAN (1000Base-T), GPIB, USB 2.0 / 3.0
Display	10.6-inch capacitive multi-touch, 1280 × 768 resolution
Warm-Up Time	5 minutes
Recommended Calibration Cycle	1 year
Display Resolution	1280 x 768 pixels
Internal Storage Type	Removable Solid-State Drive (SSD)

Physical

Power Supply	100-120 V @ 50/60/400 Hz; 220-240 V @ 50/60 Hz
Operating Temperature	0 to 55 °C
Dimensions (W×H×D)	426 × 177 × 368 mm
Weight	15.3 kg
Display Technology	10.6-inch capacitive multi-touch screen

Frequency Specifications

Frequency Range	10 Hz to 3.6, 8.4, 13.6, 26.5, 32, 44, or 50 GHz (configuration dependent)
Frequency Range Options	Option 503 (3.6 GHz), 508 (8.4 GHz), 513 (13.6 GHz), 526 (26.5 GHz), 532 (32 GHz), 544 (44 GHz), 550 (50 GHz)
Span Range	0 Hz (zero span), 10 Hz to maximum frequency
Marker Frequency Resolution	Span / (Sweep Points - 1)

Amplitude Specifications

Displayed Average Noise Level (DANL)	-172 dBm @ 1 GHz (with preamplifier and noise floor extension)
Absolute Amplitude Accuracy	±0.23 dB
Input Attenuator Range	0 to 70 dB
Input Attenuator Steps	2 dB steps

Dynamic Range & Phase Noise

Phase Noise (10 kHz offset)	-114 dBc/Hz @ 1 GHz
Third-Order Intermodulation (TOI)	+20 dBm @ 1 GHz
W-CDMA ACLR Dynamic Range	73 dBc (with noise correction)

Bandwidth Specifications

Analysis Bandwidth	25 MHz (standard); 40, 85, 125, or 160 MHz (configuration dependent)
Resolution Bandwidth (RBW) Range	1 Hz to 3 MHz (10% steps), 4, 5, 6, 8 MHz

Sweep and Trigger

Sweep Time Range	1 μ s to 6000 s (zero span)
Sweep Points	1 to 100,001
Trigger Modes	Free Run, Video, Line, External 1, External 2, RF Burst, Periodic Timer

Front Panel Interfaces

RF Input Impedance	50 Ω
Probe Power	+15 Vdc, -12.6 Vdc

Rear Panel Interfaces

Reference Output (10 MHz)	BNC(f), 10 MHz
---------------------------	----------------

System & Processing

Operating System	Windows 10
------------------	------------

Environmental & Compliance

Storage Temperature	-40 to 70 $^{\circ}$ C
---------------------	------------------------

Inputs & Outputs

Maximum Safe Average Power	+30 dBm (1 W)
Maximum DC Safe Input Voltage	$\pm$ 50 Vdc (AC coupled) / $\pm$ 0.2 Vdc (DC coupled)
RF Input Connector (Options 532, 544, 550)	2.4 mm (male), 50 Ω
Reference Input Level	-5 to +10 dBm

Performance

Amplitude Range	DANL to +30 dBm
Real-Time Analysis Bandwidth	Up to 160 MHz (option dependent)
Preamplifier	Up to 50 GHz (frequency-option dependent)
Video Bandwidth (VBW) Range	1 Hz to 8 MHz

Analysis

Trace Detectors	Normal, Peak, Sample, Negative Peak, Log power average, RMS average, Voltage average
-----------------	--

TECHNOLOGY

Signal / Spectrum Analysis

APPLICATIONS

RF/Microwave Design & Test, Wireless Connectivity, Cellular, Aerospace & Defense

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