

KEYSIGHT TECHNOLOGIES (AGILENT HP)

N1996A

The Keysight Agilent N1996A CSA Spectrum Analyzer is a portable, low-cost instrument covering 100 kHz up to 3 GHz or 6 GHz. It offers built-in stimulus/response measurement options, excellent amplitude accuracy, and hot-swappable battery operation, making it ideal for both laboratory and field-testing environments.

SPECIFICATIONS

General

Interfaces	LAN (10/100 Base-T), USB Host (Type-A), USB Device (Type-B), VGA out
Display	8.4-inch (213 mm) active matrix color TFT, VGA (640 x 480)
Warm-up Time	5 minutes
Display Resolution	640 × 480 pixels (VGA)
Display Size	8.4 inches (213 mm) diagonal
Display Type	Color transmissive TFT active matrix
Display Scale Range	Log: 0.1 to 20 dB/div in 0.1 dB steps; Linear: 10 divisions
Internal Storage Capacity	16 MB (non-volatile flash for user states, traces, and screens)

Physical

Operating Temperature	0 to 50 °C °C
Weight	7.5 kg kg

Frequency Specifications

Frequency Range	100 kHz to 3 GHz (Option 503) or 6 GHz (Option 506)
Stimulus/Response Suite Range	10 MHz to 3 GHz or 6 GHz (Option SR3/SR6)
Frequency Span Range	0 Hz (zero span), 10 Hz to 3 GHz or 6 GHz
Frequency Reference Aging Rate	±1 ppm/year
Frequency Reference Temperature Stability	±1 ppm (0 to 50 °C)

Resolution and Video Bandwidths

Resolution Bandwidth (RBW) Range	10 Hz to 5 MHz
Resolution Bandwidth (RBW) Step Size	10% adjustable steps from 10 Hz to 200 kHz, plus 250 kHz, 300 kHz, 1 MHz, 3 MHz, 5 MHz

Amplitude and Dynamic Range Specifications

Displayed Average Noise Level (DANL)	-156 dBm/Hz (with preamplifier active)
Maximum Safe RF Input Level (DC)	±50 VDC
Input Attenuator Range	0 to 40 dB
Input Attenuator Step Size	5 dB

Spurious and Distortion Responses

Third-Order Intercept (TOI)	+18 dBm
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Measurement Modes and Features

Channel Power Measurement	Supported
Adjacent Channel Power Ratio (ACPR)	Supported
Occupied Bandwidth (OBW)	Supported
Spectrum Emission Mask (SEM)	Supported
AM/FM Modulation Analysis	Optional (Option 272)
AM/FM Tune and Listen	Optional (Option 271)

Inputs, Outputs, and RF Interfaces

RF Input Connector Type	Type-N female
RF Input Impedance	50 Ω
Tracking Generator Output Connector	Type-N female, 50 Ω (with Option SR3/SR6)
External Reference Input Frequency	10 MHz

Power and Battery Parameters

Battery Chemistry / Technology	Lithium-Ion
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Environmental and Compliance

Storage Temperature Range	-40 to +70 °C
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Configuration Options

Option 503	3 GHz frequency range
Option 506	6 GHz frequency range
Option 171/172	Option SR3 / SR6

Options

Option 271	Spectrogram
Option 1CP	Rackmount kit
Option SCC	Soft carrying case
Option 1A7	ISO 17025 compliant calibration

Reference Input/Output

External Reference Output Frequency	10 MHz
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Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.