

KEYSIGHT TECHNOLOGIES (AGILENT HP)

89441A

The Keysight / Agilent HP 89441A is a Vector Signal Analyzer covering baseband through RF frequencies of DC to 2.65 GHz. It offers robust scalar and vector analysis modes, enabling detailed time-domain characterization and demodulation. With a maximum vector analysis bandwidth of 7 MHz (selectable anywhere within the frequency range) and full-frequency scalar spans up to 2648 MHz, the instrument is designed to handle complex communications signals, including W-CDMA, digital radio, and digital video with optional measurement personalities. It captures both phase and amplitude characteristics in time-series data for advanced RF and baseband analysis.

SPECIFICATIONS

General

Interfaces	HP-IB (GPIB, IEEE-488.2)
Local Storage	Internal 3.5-inch 1.44 MB floppy disk drive

Frequency Characteristics

Frequency Range	DC to 2.65 GHz
Frequency Span Range (Scalar Mode)	Up to 2648 MHz

Vector and Modulation Analysis

Maximum Analysis Bandwidth	7 MHz (Vector RF Mode)
Analysis Modes	Scalar RF, Vector RF, Vector Baseband
Supported Demodulation Formats	AM, FM, PM; Optional: Vector modulation, digital radio, digital video
Time Record Capture	Phase and amplitude characteristics (Vector RF mode)

Inputs & Outputs

RF Input Connector	Type-N (female)
RF Input Impedance	50 Ω
Baseband Input Connectors	BNC (female)
Number of RF Inputs	1

Processing & Analysis

Averaging Types	RMS (video), RMS exponential, vector, peak hold
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Frequency

Frequency Resolution	0.001 Hz
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Analysis

FFT Resolution	51 to 3201 lines
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Source

Source Frequency Range (RF)	2 MHz to 2.65 GHz
Source Frequency Range (Baseband)	DC to 10 MHz
Source Waveforms	Sine, random noise, periodic random noise, chirp, arbitrary

Configuration Options

Second Baseband Channel	Available via Option AY7
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Performance

Display Update Rate	Up to 60 updates/s
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TECHNOLOGY

Vector Signal Analysis

APPLICATIONS

W-CDMA, Digital Radio, Digital Video, Baseband and RF Analysis

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