

KEYSIGHT TECHNOLOGIES (AGILENT HP)

E4446A

The Keysight / Agilent E4446A is a high-performance PSA Series spectrum analyzer capable of measuring and monitoring complex RF, microwave, and millimeter-wave signals from 3 Hz to 44 GHz. It features high dynamic range, superior phase noise performance, and offers 16 optional built-in measurement personalities. With optional analysis bandwidths up to 80 MHz, it is designed for demanding aerospace, defense, and wireless communication test applications.

SPECIFICATIONS

General

Display	8.4 inch color LCD
Recommended Calibration Cycle	1 year
Environmental Standard	MIL-PRF-28800F Class 3

Physical

Operating Temperature	0 to 55 °C
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Frequency Specifications

Frequency Range	3 Hz to 44 GHz
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Amplitude Specifications

Input Attenuator Range	0 to 70 dB (in 2 dB steps)
Maximum Safe Input Level (Average Total Power)	+30 dBm (1 W)

Bandwidth Specifications

Resolution Bandwidth (RBW) Range	1 Hz to 8 MHz
Video Bandwidth (VBW) Range	1 Hz to 8 MHz

Sweep and Trigger Specifications

Sweep Time Range (Span > 0 Hz)	1 ms to 2000 s
Sweep Time Range (Zero Span)	1 μs to 6000 s
Trigger Sources	Free Run, Video, Line, External, RF Burst

Display and Trace Specifications

Supported Trace Detectors	Normal, Peak, Sample, Negative Peak, Log Power Average, RMS Average, Voltage Average
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Front Panel Inputs and Outputs

RF Input Connector Type	2.4 mm (male)
RF Input Impedance	50 Ω

Rear Panel Inputs and Outputs

10 MHz Reference Input	BNC (female)
10 MHz Reference Output	BNC (female)

Performance

Attenuator Step Size	2 dB
Trace Functions	Clear/Write, Max Hold, Min Hold, View, Blank, Average

Configuration & Options

Microwave Preselector Bypass	Option 123
External Mixing Capability	Option AYZ

Environmental

Storage Temperature Range	-40 °C to +70 °C
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Power

Maximum Power Dissipation	450 W
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TECHNOLOGY

RF / Microwave Spectrum Analysis

APPLICATIONS

Aerospace & Defense, Wireless Communications, Microwave Component Test

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