

KEYSIGHT TECHNOLOGIES (AGILENT HP)

E4443A

The Keysight (Agilent) E4443A is a high-performance spectrum analyzer from the PSA series, operating from 3 Hz to 6.7 GHz. It offers exceptional dynamic range and accuracy for measuring and monitoring complex RF signals, with optional analysis bandwidths up to 80 MHz and a wide range of measurement personalities.

SPECIFICATIONS

General

Display	21.3 cm (8.4 in) color TFT LCD, 640 × 480 pixels
Warm-up Time	5 minutes (to meet general specifications)
Calibration Cycle	1 year

Physical

Power Supply	100-132 Vrms (47-440 Hz) or 195-250 Vrms (47-66 Hz); < 260 W (on), < 15 W (standby)
Operating Temperature	0 to +55 °C
Dimensions (W×H×D)	426 × 177 × 482 mm
Weight	23 kg

Frequency Specifications

Frequency Range	3 Hz to 6.7 GHz
Analysis Bandwidth	Up to 40 or 80 MHz (configuration dependent)

Dynamic Range and Spurious Responses

Third-Order Intercept (TOI)	+19 dBm @ 1 GHz (typical)
-----------------------------	---------------------------

Resolution and Video Bandwidths

Resolution Bandwidth (RBW) Range	1 Hz to 8 MHz
----------------------------------	---------------

Inputs and Outputs

RF Input Connector	Type-N Female
RF Input Impedance	50 Ω

Performance

Video Bandwidth (VBW)	1 Hz to 8 MHz
Sweep Time (Span > 0 Hz)	1 ms to 2000 s
Sweep Time (Zero Span)	1 μ s to 6000 s
Reference Frequency	10 MHz
Frequency Reference Aging	$\pm 1 \times 10^{-7}$ / year (standard)
Detector Types	Normal, Peak, Sample, Negative Peak, Log Power Average, RMS Average, Voltage Average

Inputs & Outputs

Input Attenuator	0 to 70 dB in 2 dB steps
Maximum DC Input	0 Vdc
Trigger Sources	Free run, line, video, RF burst, external front, external rear

Sweep

Sweep Points	101 to 8192 (Span > 0 Hz)
--------------	---------------------------

Frequency

Span Range	0 Hz (zero span), 10 Hz to 6.7 GHz
------------	------------------------------------

Amplitude

Reference Level Range	-170 dBm to +30 dBm
Reference Level Resolution	0.01 dB (Log scale), 0.1% of reference level (Linear scale)
Display Scale (Log)	0.1 to 20 dB/division in 0.1 dB steps

Bandwidth

Resolution Bandwidth Selectivity (60 dB : 3 dB)	4.1:1 (nominal, depending on filter type)
---	---

Environmental

Storage Temperature	-40 °C to +70 °C
Operating Altitude	Up to 4,600 meters (15,000 ft)

Compliance

EMC Compliance	CISPR 11 / EN 55011 Group 1 Class A, IEC/EN 61326
Safety Compliance	IEC/EN 61010-1, CSA C22.2 No. 1010.1

Power

Power Consumption	< 260 W (maximum)
-------------------	-------------------

TECHNOLOGY

Spectrum Analyzer

APPLICATIONS

RF Test and Measurement

