

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8595A

The Keysight / Agilent / HP 8595A is a highly portable, high-performance superheterodyne spectrum analyzer operating across a frequency range of 9 kHz to 6.5 GHz. Designed for general-purpose RF testing, it features robust build quality, flexible options such as a built-in 2.9 GHz tracking generator, and support for memory card storage.

SPECIFICATIONS

General

Interfaces	HP-IB (GPIB) (Option 021), RS-232 (Option 023), or HP-IL (Option 022)
Display	Monochrome CRT
Warm-up Time	30 minutes
Calibrator Output Impedance	50 ohms nominal

Physical

Power Supply	86 to 127 V AC / 195 to 253 V AC, 47 to 66 Hz (up to 440 Hz optional), <150 VA
Operating Temperature	0 °C to +55 °C °C
Dimensions (W×H×D)	325 mm × 163 mm × 427 mm mm
Weight	14.5 kg kg

Frequency

Frequency Range	9 kHz to 6.5 GHz
Frequency Span Range	10 kHz to 6.5 GHz, plus 0 Hz (Zero Span)
Resolution Bandwidth (RBW) Range	1 kHz to 3 MHz (in 1, 3, 10 sequence); optional 30 Hz to 300 Hz (Option 130)
Video Bandwidth (VBW) Range	30 Hz to 1 MHz (in 1, 3, 10 sequence); optional 1 Hz to 300 Hz (Option 130)
SSB Phase Noise (30 kHz Offset)	≤ -95 dBc/Hz
Internal Reference Aging Rate	±2 x 10 ⁻⁶ / year (standard)

Amplitude

Maximum Safe RF Input Level (CW)	+30 dBm (1 W)
Maximum DC Input Voltage	0 Vdc (DC coupled input)
Input Attenuator Range	0 to 70 dB
Input Attenuator Step Size	10 dB
Calibrator Output Amplitude	-20 dBm
Frequency Response (9 kHz to 2.9 GHz)	±1.5 dB
Frequency Response (2.75 GHz to 6.5 GHz)	±2.5 dB

Sweep & Acquisition

Sweep Time Range (Span > 0)	20 ms to 100 s
Sweep Time Range (Zero Span)	20 μ s to 100 s

Inputs & Outputs

RF Input Connector	Type-N female
RF Input Impedance	50 Ω
External Reference Input	BNC female, 10 MHz, -2 to +10 dBm
Reference Output	BNC female, 10 MHz, 0 dBm nominal
Calibrator Output Connector	BNC female
Sweep Output Connector	BNC female (rear panel)
External Trigger Input Connector	BNC female (rear panel)

System & Memory

Memory Card Support	32 Kbytes memory cards
Optional Tracking Generator	Built-in 2.9 GHz tracking generator (Option 010)

Environmental

Storage Temperature	-40 °C to +75 °C
Environmental Standards	Designed to meet MIL-T-28800D Type III, Class 3, Style C

Frequency Reference

Calibrator Output Frequency	300 MHz
Optional High Stability Timebase Aging Rate (Option 1D5)	$\pm 1 \times 10^{-7}$ / year
Optional High Stability Timebase Temperature Stability (Option 1D5)	$\pm 1.1 \times 10^{-7}$

Display & Sweep

Number of Display Traces	3
Active Trace Points	401
Sweep Trigger Modes	Free Run, Single, Line, Video, External
Display Type	Monochrome CRT

Spurious Responses

Second Harmonic Distortion (10 MHz to 2.9 GHz)	<-70 dBc (for -40 dBm mixer level)
Third-Order Intermodulation Distortion	<-70 dBc (for two -30 dBm tones at mixer, >50 kHz separation)
Residual Responses (10 kHz to 6.5 GHz)	<-90 dBm (150 kHz to 6.5 GHz)

Power Requirements

AC Power Supply Frequency Range	47 Hz to 66 Hz (and 360 Hz to 440 Hz)
AC Power Consumption	< 150 VA (without options)

RF Input

Input VSWR (9 kHz to 2.9 GHz)	< 1.5:1 (with >= 10 dB input attenuation)
Input VSWR (2.75 GHz to 6.5 GHz)	< 2.0:1 (with >= 10 dB input attenuation)

Tracking Generator

Optional Tracking Generator Frequency Range (Option 010)	9 kHz to 2.9 GHz
Optional Tracking Generator Output Level Range (Option 010)	-1 to -66 dBm

Options

Narrow Resolution Bandwidths Option	Option 130
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Interfaces & I/O

HP-IB and Parallel Interface Option	Option 041
RS-232 and Parallel Interface Option	Option 043

TECHNOLOGY

Superheterodyne Spectrum Analyzer

APPLICATIONS

RF and Microwave Frequency 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.