

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8340A

The Keysight (Agilent/HP) 8340A is a synthesized sweeper designed for high-performance RF and microwave applications, operating across a wide frequency range from 10 MHz to 26.5 GHz. It combines the precision of a synthesizer with the sweep capabilities of a traditional sweep oscillator, making it ideal for component test and signal simulation.

SPECIFICATIONS

General

Interfaces	HP-IB (GPIB)
Display	LED digital display for frequency, power, and sweep parameters

Physical

Power Supply	100, 120, 220, or 240 VAC (+10% / -15%), 48 to 66 Hz, 500 VA max
Operating Temperature	0 to 55 °C °C
Dimensions (W×H×D)	425 mm x 178 mm x 624 mm mm
Weight	34 kg kg

Frequency Specifications

Frequency Range	10 MHz to 26.5 GHz
Frequency Resolution	1 Hz to 4 Hz (band dependent, 1 Hz with Option 001)
Time Base Aging Rate	< 1 x 10 ⁻⁹ / day

RF Output Specifications

Output Impedance	50 Ohm
Maximum Leveled Power (10 MHz to 13.5 GHz)	+12 dBm
Maximum Leveled Power (13.5 GHz to 20 GHz)	+10 dBm
Maximum Leveled Power (20 GHz to 26.5 GHz)	+9 dBm
Power Resolution	0.1 dB

Spectral Purity

Residual FM (10 MHz to 7.0 GHz)	< 15 Hz RMS (CW mode, 50 Hz to 15 kHz BW)
Residual FM (7.0 to 13.5 GHz)	< 30 Hz RMS (CW mode, 50 Hz to 15 kHz BW)
Residual FM (13.5 to 20.0 GHz)	< 45 Hz RMS (CW mode, 50 Hz to 15 kHz BW)
Residual FM (20.0 to 26.5 GHz)	< 60 Hz RMS (CW mode, 50 Hz to 15 kHz BW)
Residual AM	< -55 dBc (CW mode, 50 Hz to 15 kHz BW)

Modulation Capabilities

Modulation Capabilities	AM, FM, Pulse
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Inputs & Outputs (Connectivity)

RF Output Connector Type	APC-3.5 male
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Modulation

Pulse Modulation Rise/Fall Time	< 25 ns
AM Modulation Bandwidth (3 dB)	DC to 100 kHz
FM Modulation Bandwidth (3 dB, AC)	100 Hz to 10 MHz
FM Modulation Bandwidth (3 dB, DC)	DC to 10 MHz

Power

Leveled Power Flatness (10 MHz to 13.5 GHz)	±0.9 dB
Leveled Power Flatness (13.5 to 20 GHz)	±1.4 dB
Leveled Power Flatness (20 to 26.5 GHz)	±1.9 dB
Power Sweep Range (10 MHz to 13.5 GHz)	> 20 dB
Power Sweep Range (13.5 to 20 GHz)	> 15 dB
Power Sweep Range (20 to 26.5 GHz)	> 12 dB

Frequency

External Reference Input	10 MHz (at nominal 0 dBm)
Internal Reference Output	10 MHz (at nominal 0 dBm)

Sweep

Sweep Time Range	10 ms to 100 s
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Output Power

Absolute Power Accuracy (10 MHz to 13.5 GHz)	±1.2 dB (standard) / ±1.5 dB (Option 005)
Absolute Power Accuracy (13.5 to 20.0 GHz)	±1.5 dB (standard) / ±1.9 dB (Option 005)
Absolute Power Accuracy (20.0 to 26.5 GHz)	±2.0 dB (standard) / ±2.5 dB (Option 005)
Output SWR (10 MHz to 13.5 GHz)	< 1.5
Output SWR (13.5 to 20.0 GHz)	< 1.9
Output SWR (20.0 to 26.5 GHz)	< 2.2
Reverse Power Protection	1 W RF, 25 VDC maximum

General & Environmental

Storage Temperature	-55 °C to +75 °C
Operating Altitude	Up to 4,570 m (15,000 ft)
Power Consumption	500 VA maximum

TECHNOLOGY

Synthesized Sweep Signal Generation

APPLICATIONS

RF and Microwave Component Testing, Signal Simulation

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