

KEYSIGHT TECHNOLOGIES (AGILENT HP)

83620B

The Keysight / Agilent HP 83620B is a high-performance synthesized sweeper covering the 10 MHz to 20 GHz frequency range. It combines the accuracy and low phase noise of a synthesized signal generator with the speed and versatility of an analog sweep oscillator. As part of the 8360B series, it includes AM, FM, and pulse modulation as standard features, making it highly versatile for broadband RF and microwave component testing, radar simulation, and general-purpose signal generation.

SPECIFICATIONS

General

Interfaces	GPIB (IEEE-488)
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Physical

Power Supply	100/120/220/240 VAC $\pm$ 10%, 48-66 Hz, 400 VA max
Operating Temperature	0 to 55 °C
Dimensions (W×H×D)	425 × 178 × 648 mm
Weight	27.2 kg

Frequency Characteristics

Frequency Range	10 MHz to 20 GHz
Frequency Resolution	1 kHz (Standard) / 1 Hz (Option 008)

Sweep Characteristics

Sweep Modes	Analog Ramp, Digital Step, List
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Output Power Characteristics

Maximum Leveled Power	+13 dBm
Minimum Settable Power	-20 dBm (Standard) / -110 dBm (Option 001 step attenuator)

Spectral Purity

Phase Noise (10 kHz Offset)	<-80 dBc/Hz (@ 10 GHz carrier)
Harmonics	<-50 dBc (2.0 to 20 GHz)
Sub-harmonics	<-50 dBc (7.0 to 20 GHz)
Non-harmonic Spurious	<-65 dBc (>2.0 GHz)

Modulation

Pulse Modulation On/Off Ratio	> 80 dB
Minimum Pulse Width	50 ns

Connectivity and Interfaces

RF Output Connector	3.5 mm (male)
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RF Output

Output Impedance	50 Ω nominal
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Power

Power Resolution	0.01 dB
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Sweep

Sweep Time	10 ms to 100 s
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Frequency

Timebase Aging Rate (Option 1E5)	5 x 10 ⁻¹⁰ / day
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Environmental

Storage Temperature	-40 °C to +75 °C
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Output Power

Power Level Flatness	±0.6 dB
Step Attenuator (Option 001)	110 dB range in 10 dB steps

TECHNOLOGY

Synthesized Sweeper

APPLICATIONS

RF & Microwave Testing

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