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Data Sheet

August 12, 2026

HP / AGILENT

HP / Agilent 83620A Synthesized Sweeper, 10 MHz to 20 GHz

The 83620A is the 10 MHz to 20 GHz member of the HP 8360 series synthesized sweepers. It combines synthesized CW accuracy with sweep-oscillator speed for component, receiver, and frequency-conversion test. Option 008 provides 1 Hz frequency resolution; family Option 006 adds high-performance pulse modulation. Alias: 83620A; Agilent 83620A; HP 83620A; Keysight 83620A Maximum power class: +13 dBm (family literature) Power sweep range class: -20 dBm to maximum power Harmonics 2.2 to 20 GHz class: at least 50 dB below carrier



MODEL

**HP / Agilent
83620A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

83620A

LISTING

<https://aumictechlabs.com/products/83620a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The HP/Agilent 83620A Synthesized Sweeper is a signal generation instrument covering 10 MHz to 20 GHz, designed for RF and microwave component, device, and system testing. It combines synthesizer, sweeper, and modulation functions in a single unit. The instrument delivers precise frequency control through indirect synthesis with 1 kHz standard resolution (1 Hz optional), maximum leveled RF output of +13 dBm, and phase noise of -70 dBc at 20 GHz with 10 kHz offset. Harmonics are suppressed to at least 50 dB below the carrier from 2.0 to 20 GHz. Technical Specifications Frequency Range: 10 MHz to 20 GHz Frequency Resolution: 1 kHz standard; 1 Hz

optional (Opt 008) Maximum Levelled RF Output: +13 dBm RF Output Power Range (with Opt 001): +20 dBm to -110 dBm Power Sweep Range: -20 dBm to maximum power Phase Noise (20 GHz, 10 kHz offset): -70 dBc Harmonic Suppression: ≥ 50 dB below carrier, 2.0 to 20 GHz RF Output Connector: 3.5 mmKey Features Sweep Modes: Step, List, Ramp Modulation: Amplitude modulation (AM) with linear and scan modes, frequency modulation (FM) to ± 8 MHz deviation at rates up to 8 MHz, pulse modulation with on/off ratio exceeding 80 dB and rise/fall times below 25 ns (10 ns with Opt 006) Pulse Performance: Minimum internally leveled RF pulse width $< 1 \mu\text{s}$; minimum RF pulse width < 50 ns (15 ns with Opt 006) User Flatness Correction: Enables accurate leveling at remote test points Fixed and Swept Frequency Offset: Supports two-tone measurementModulation Capabilities AM with modulation depth to 99.7%, 3 dB bandwidth 100 kHz FM with rates to 8 MHz, maximum deviation ± 8 MHz Scan modulation for antenna pattern simulationAvailable Options Step attenuator (Opt 001), internal modulation generator (Opt 002), fast pulse modulation (Opt 006), 1 Hz frequency resolution (Opt 008), rear panel RF output (Opt 004), network analyzer interface (Opt H69), frequency limit to 2 GHz (Opt H80), and rack mount kit (Opt 908).

Features & description

From manufacturer datasheet

Features

- Widest low-end coverage in the 8362xA pair (10 MHz vs 83622A at 2 GHz) • Step, list, and ramp sweep modes • Scan and linear AM modes • Optional 1 Hz resolution and pulse modulator

Applications

- Broadband microwave component and filter test from HF through 20 GHz • Receiver and converter stimulus • Step, list, and ramp frequency sweeps • User flatness correction and two-tone offset setups

83620A Characteristics / Specifications

PARAMETER	VALUE
Model	83620A
Manufacturer	HP / Agilent
Instrument Type	Synthesized Sweeper
Alias	83620A; Agilent 83620A; HP 83620A; Keysight 83620A
Frequency range	10 MHz to 20 GHz
Standard frequency resolution	1 kHz
Maximum power class	+13 dBm (family literature)
Power sweep range class	-20 dBm to maximum power
Harmonics 2.2 to 20 GHz class	at least 50 dB below carrier
Harmonics above 20 GHz class (family)	at least 35 dB below carrier
Max FM deviation locked class	+/-8 MHz
Sweep modes	Step, List, Ramp
Pulse Opt 006 on/off ratio class	greater than 80 dB
Pulse Opt 006 rise/fall class	less than 10 ns Notes Specs from HP/Agilent 8360-series / 83620A literature. Confirm Option 006/008 and actual max leveled power on the unit.

83620A Specifications

PARAMETER	VALUE
HP / Agilent 83620A Synthesized Sweeper	Overview
Applications	- Broadband microwave component and filter test from HF through 20 GHz
Key Features	- Widest low-end coverage in the 8362xA pair (10 MHz vs 83622A at 2 GHz)
Technical Specifications	Model: 83620A
Notes	Specs from HP/Agilent 8360-series / 83620A literature. Confirm Option 006/008 and actual max leveled power on the unit.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

performance pulse modulation.

Applications

- Broadband microwave component and filter test from HF through 20 GHz
- Receiver and converter stimulus
- Step, list, and ramp frequency sweeps
- User flatness correction and two-tone offset setups

Key Features

- Widest low-end coverage in the 8362xA pair (10 MHz vs 83622A at 2 GHz)
- Step, list, and ramp sweep modes
- Scan and linear AM modes
- Optional 1 Hz resolution and pulse modulator

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	83620A
Manufacturer	HP / Agilent
Instrument Type	Synthesized Sweeper
Alias	83620A; Agilent 83620A; HP 83620A; Keysight 83620A

Frequency range: 10 MHz to 20 GHz
Standard frequency resolution: 1 kHz
Option 008 frequency resolution: 1 Hz

Specifications

PARAMETER	VALUE
Maximum power class	+13 dBm (family literature)
Power sweep range class	-20 dBm to maximum power
Harmonics 2.2 to 20 GHz class	at least 50 dB below carrier
Harmonics above 20 GHz class (family)	at least 35 dB below carrier

Phase noise class at 20 GHz, 10 kHz offset: -76 dBc

Specifications

PARAMETER	VALUE
Max FM deviation locked class	+/-8 MHz
Sweep modes	Step, List, Ramp
Pulse Opt 006 on/off ratio class	greater than 80 dB

PARAMETER	VALUE
Pulse Opt 006 rise/fall class	less than 10 ns
Notes Specs from HP/Agilent 8360-series / 83620A literature. Confirm Option 006/008 and actual max leveled power on the unit.	

Ordering Information

OPTION	DESCRIPTION
Option 008	provides 1 Hz frequency resolution; family Option 006 adds high-performance pulse modulation.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

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NIST-traceable calibration · SAM registered ·
30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.