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Data Sheet

August 13, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 8341A Synthesized Sweeper, 10 MHz to 20 GHz

Option 003 / 007 spectral-purity variants; H19 19 GHz maximum output Compatible with HP 8410B/C via Option 850 interface cable Manufacturer: Hewlett-Packard / Agilent / Keysight Alias: HP 8341A; Agilent 8341A; Keysight 8341A Compatible with HP 8410B/C via Option 850 interface cable Manufacturer: Hewlett-Packard / Agilent / Keysight Alias: HP 8341A; Agilent 8341A; Keysight 8341A Frequency Resolution: 1 to 4 Hz depending on band



MODEL

**Agilent / Keysight
8341A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

8341A

LISTING

<https://aumictechlabs.com/products/8341a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 8341A Synthesized Sweeper is a signal generation instrument covering 10 MHz to 20 GHz using indirect synthesis techniques. It delivers calibrated output from +10 dBm to -110 dBm with maximum power of +20 dBm, supported by long-term stability of 1×10^{-9} /day and low single-sideband phase noise. Frequency resolution reaches 1 to 4 Hz, enabling precise tuning for device characterization and system simulation across RF and microwave bands. Technical Specifications Frequency Range: 10 MHz to 20 GHz Frequency Resolution: 1 to 4 Hz Output Power: +10 dBm to -110 dBm (calibrated); +20 dBm (maximum); +13 dBm from 2.3 to 18.6 GHz with Option 002 Output Stability: 1×10^{-9} /day Phase Noise: Low single-sideband; improved specifications available with Option 007 Spectral Purity: Improved RF purity from 2.3 to 7 GHz

Switching Time: CW < 35 ms typical; fast phase-lock 11–22 ms (frequency and step-dependent)
Modulation: AM and FM; pulse modulation with Option 006 Sweep: Analog sweeps from 100 Hz to full frequency span Input Power: 100–240 VAC, 50–60 Hz

Key Features Indirect synthesis for high signal purity and frequency stability Rear panel RF output standard; front and attenuator configurations available Fast phase-lock switching between 11 and 22 ms Wide dynamic range supports both CW and swept operation Benchtop form factor with optional rack flange kit (Option 913)

Typical Applications Microwave device characterization Radar system development and testing RF and communication hardware validation Network analyzer source applications

Compatibility & Integration Suitable for use as a signal source with microwave network analyzers such as the Keysight 8510B. Front and rear panel RF output options, with and without attenuators, accommodate various system configurations.

8341A Characteristics / Specifications

PARAMETER	VALUE
Model	8341A
Manufacturer	Hewlett-Packard / Agilent / Keysight
Instrument Type	Synthesized sweeper
Alias	HP 8341A; Agilent 8341A; Keysight 8341A
Frequency Range	10 MHz to 20.0 GHz
Frequency Resolution	1 to 4 Hz depending on band
Long Term Stability	1×10^{-9} per day
CW Switching Time Typical	better than 35 ms
Fast Phase Lock Switching	11 to 22 ms depending on frequency and step size
Minimum Analog Sweep Width	100 Hz
Maximum Analog Sweep Width	full 10 MHz to 20 GHz range
Frequency Markers	5
Output Power Typical	+10 dBm to +11 dBm class (configuration dependent)
Output Range Without Attenuator Listing	+10 dBm to -20 dBm
Output Level Resolution	0.1 dB
Internal Level Accuracy	0.9 dB
Internal Flatness	0.6 dB to 1.5 dB depending on output level range
Phase Noise Listing	-57 dBc to -107 dBc in 1 Hz noise bandwidth (band dependent)
Modulation Standard	AM
Modulation Optional	FM; pulse with Option 006
Pulse Width Capability Family	100 ns class (8340/8341 family documentation)
Calibrated Output With Attenuator Family	+10 dBm to -110 dBm (8340A/8341A Option 001 90 dB attenuator class)
Interface	HP-IB
Network Analyzer Use	HP 8510B source; 8410B/C with Option 850 cable
Related Wider Band Model	8340A, 10 MHz to 26.5 GHz, same synthesis architecture

PARAMETER	VALUE
Successor Class	Keysight E8257D PSG analog signal generator (manufacturer replacement path) Notes Specs from HP/Agilent 8341A and 8340A/8341A family data-sheet and catalog descriptions. Confirm installed options (001 attenuator, 002 high power, 006 pulse, H19) and actual leveled-power sticker on the unit. Do not apply 8340A 26.5 GHz coverage to an 8341A.

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 comparable to the HP 8672A / 8673 synthesized generators and long-term stability of 1×10^{-9} per day. Typical CW switching is better than 35 ms; a fast phase-lock mode reduces that to 11 to 22 ms depending on frequency and step size. Analog sweep widths from 100 Hz to the full band and five frequency markers support 8510B-class network analysis.

Applications

Microwave network-analyzer source for HP 8510B; broadband and narrowband swept component test; replacement of a separate sweeper, counter, and RF/microwave synthesizer in ATE; AM and optional pulse-modulated stimulus.

Key Features

Indirect synthesis with 1 to 4 Hz resolution across 10 MHz to 20 GHz

Five frequency markers; analog sweep from 100 Hz to full span

HP-IB control of synthesizer and sweep functions

Option 001 front RF with 90 dB attenuator; Option 002 guaranteed +13 dBm from 2.3 to 18.6 GHz

Option 004/005 rear-panel RF (with or without attenuator); Option 006 pulse modulation

Option 003 / 007 spectral-purity variants; H19 19 GHz maximum output

Compatible with HP 8410B/C via Option 850 interface cable

Technical Specifications

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PARAMETER	VALUE
Modulation Standard	AM
Modulation Optional	FM; pulse with Option 006
Pulse Width Capability Family	100 ns class (8340/8341 family documentation)
Calibrated Output With Attenuator Family	+10 dBm to -110 dBm (8340A/8341A Option 001 90 dB attenuator class)

Option 002 Power: guaranteed +13 dBm, 2.3 to 18.6 GHz
Option 001: front RF output with 90 dB attenuator
Option 004: rear-panel RF output with attenuator
Option 005: rear-panel RF output without attenuator
Option 006: RF pulse modulation
Option 007: relaxed or improved phase-noise specification variant (confirm faceplate)
Option H19: 19 GHz maximum output

Specifications

PARAMETER	VALUE
Interface	HP-IB
Network Analyzer Use	HP 8510B source; 8410B/C with Option 850 cable
Related Wider Band Model	8340A, 10 MHz to 26.5 GHz, same synthesis architecture
Successor Class	Keysight E8257D PSG analog signal generator (manufacturer replacement path)

Notes
Specs from HP/Agilent 8341A and 8340A/8341A family data-sheet and catalog descriptions. Confirm installed options (001 attenuator, 002 high power, 006 pulse, H19) and actual leveled-power sticker on the unit. Do not apply 8340A 26.5 GHz coverage to an 8341A.

Ordering Information

OPTION	DESCRIPTION
Option 001	front RF with 90 dB attenuator; Option 002 guaranteed +13 dBm from 2.3 to 18.6 GHz
Option 006	pulse modulation
Option 003	/ 007 spectral-purity variants; H19 19 GHz maximum output
Option 850	interface cable
Option 002	Power: guaranteed +13 dBm, 2.3 to 18.6 GHz

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

Aumictech

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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.