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Data Sheet

August 13, 2026

AGILENT / KEYSIGHT

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

Keysight 8341B Synthesized Sweeper 10 MHz to 20 GHz The HP/Agilent/Keysight 8341B is a synthesized sweep generator covering 10 MHz to 20 GHz. It combines indirect-synthesis frequency precision with broadband analog sweep convenience, calibrated output to -110 dBm, AM/FM/pulse modulation, and full HP-IB control for network analysis and ATE. The HP/Agilent/Keysight 8341B is a synthesized sweep generator covering 10 MHz to 20 GHz. It combines indirect-synthesis frequency precision with broadband analog sweep convenience, calibrated output to -110 dBm, AM/FM/pulse modulation, and full HP-IB control for network analysis and ATE.



MODEL

**Agilent / Keysight
8341B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

8341B

LISTING

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

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 8341B Synthesized Sweeper generates precise RF and microwave signals from 10 MHz to 20 GHz. This discontinued instrument combines synthesizer and broadband sweep oscillator functionality, delivering stable frequency control and integrated modulation for RF component testing, system characterization, and EW receiver validation. Technical Specifications Frequency Performance Operating range: 10 MHz to 20 GHz Frequency resolution: 1 Hz (10 MHz to <7.0 GHz); 2 Hz (7.0 to <13.5 GHz); harmonic multiplication (1 to 3) at $n \times 1$ Hz CW

switching time: <50 msec typical, <35 ms with fast phase-lock (11 to 22 ms) Internal 10 MHz time base with aging rate $<1 \times 10^{-9}$ per day after 72-hour warm-up Temperature coefficient: $<1 \times 10^{-10}$ per °C Line voltage coefficient: $<1 \times 10^{-11}$ per 10% line change Output Specifications Amplitude range: +10 dBm to -110 dBm (calibrated); maximum +20 dBm Output connector: Type N female, 50 Ω impedance Phase noise: -116 dBc/Hz at 10 kHz offset Non-harmonics: <-65 dBc at 10 GHz Spurious signals: <-70 dBc at 10 GHz Harmonics: 80 dB; rise/fall times ≤ 25 ns; internally leveled minimum ≤ 100 ns; unleveled minimum typically ≤ 25 ns Amplitude modulation: 3 dB bandwidth DC to 100 kHz; depth 0 to 90%; sensitivity 100%/V Frequency modulation: modulation rate 50 kHz to 10 MHz; peak deviation to 10 MHz; selectable sensitivity (1 MHz/V or 10 MHz/V) Simultaneous pulse, AM, and FM modulation supported Sweep Operation CW or swept modes with analog sweep from 100 Hz sweep frequency

Key Features Synthesized architecture ensures frequency accuracy and repeatability Fast frequency switching minimizes test cycle times Integrated modulation eliminates external signal conditioning for pulse, AM, and FM Low phase noise and spurious performance suitable for sensitive receiver testing Stable internal reference enables extended measurement sessions without recalibration

Typical Applications RF and microwave component characterization Electronic warfare receiver testing System-level frequency response validation Broadband signal generation for filter and amplifier measurements

Features & description

From manufacturer datasheet

Features

- Frequency coverage 10 MHz to 20 GHz • Frequency resolution 1 to 4 Hz depending on band • Calibrated output +10 dBm to -110 dBm • Quartz oven time base and step attenuator standard class • Pulse AM FM modulation and analog sweep • HP-IB (GPIB) full remote control

Applications

- Broadband synthesized microwave sweep 10 MHz to 20 GHz • Network analyzer source for scalar and vector systems • ATE microwave stimulus with HP-IB automation • Pulse and AM modulated microwave component testing

8341B Characteristics / Specifications

PARAMETER	VALUE
Model	8341B
Manufacturer	Keysight / Agilent / Hewlett Packard
Instrument Type	Synthesized Sweeper
Alias	8341B; HP 8341B; Agilent 8341B; Keysight 8341B
Frequency range	10 MHz to 20 GHz
Frequency resolution	1 to 4 Hz depending on frequency band
Minimum sweep width class	100 Hz
Maximum sweep width	full frequency range
Calibrated output high	+10 dBm
Calibrated output low	-110 dBm
Output level resolution	0.1 dB
Long term stability	about 1×10^{-9} per day
CW switching time typical	better than 35 ms
CW switching with phase lock	11 to 22 ms depending on step
Spurious output	less than or equal to -60 dBc
Input impedance	50 ohm
Output impedance	50 ohm
Operating temperature	0 to 55 C
Pulse modulation	standard (Option 006 delete)
AM modulation	yes
FM modulation	yes
Remote control	HP-IB IEEE-488
RF connector typical	TypeNfemale 50 ohm
Form	full rack microwave sweeper synthesizer
Dimensions class	about 188 mmHx 426 mmWx 610 mmDWeight class: about 75 lb Notes Specs from HP/Agilent/Keysight 8340B/8341B synthesized sweeper

PARAMETER

VALUE

operating manual and product listings (10 MHz–20 GHz). Confirm attenuator/rear RF options and Option 003/006/007 on the unit.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 to 55 C
Operating Temperature	0 to 55 C
Pulse modulation	standard (Option 006 delete)
AM modulation	yes
FM modulation	yes
Remote control	HP-IB IEEE-488
RF connector typical	TypeNfemale 50 ohm
Form	full rack microwave sweeper synthesizer
Dimensions class	about 188 mmHx 426 mmWx 610 mmDWeight class: about 75 lb Notes Specs from HP/Agilent/Keysight 8340B/8341B synthesized sweeper operating manual and product listings (10 MHz–20 GHz). Confirm attenuator/rear RF options and Option 003/006/007 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.

Specifications	
Specifications	
PARAMETER	VALUE
Model	8341B
Manufacturer	Keysight / Agilent / Hewlett Packard
Instrument Type	Synthesized Sweeper
Alias	8341B; HP 8341B; Agilent 8341B; Keysight 8341B
Frequency range	10 MHz to 20 GHz
Frequency resolution	1 to 4 Hz depending on frequency band
Minimum sweep width class	100 Hz
Maximum sweep width	full frequency range
Calibrated output high	+10 dBm
Calibrated output low	-110 dBm
Output level resolution	0.1 dB
Long term stability	about 1 x 10 ⁻⁹ per day
CW switching time typical	better than 35 ms
CW switching with phase lock	11 to 22 ms depending on step
Spurious output	less than or equal to -60 dBc
Input impedance	50 ohm
Output impedance	50 ohm
Operating temperature	0 to 55 C
Pulse modulation	standard (Option 006 delete)
AM modulation	yes
FM modulation	yes
Remote control	HP-IB IEEE-488
RF connector typical	TypeNfemale 50 ohm
Option 003: low harmonics	
Option 004: rear panel output with attenuator	
Option 005: rear panel output without attenuator	
Form: full rack microwave sweeper synthesizer	
Dimensions class: about 188 mmHx 426 mmWx 610 mmDWeight class: about 75 lb	

Notes

Specs from HP/Agilent/Keysight 8340B/8341B synthesized sweeper operating manual and product listings (10 MHz-20 GHz). Confirm attenuator/rear RF options and Option 003/006/007 on the unit.

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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<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
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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.