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Data Sheet

August 14, 2026

HP / AGILENT

HP / Agilent 3335A Synthesizer/Level Generator

HP Agilent 3335A Synthesizer Level Generator 200 Hz to 81 MHz The HP/Agilent 3335A isaprecision synthesizer/level generator covering 200 Hz to 81 MHz with 1 mHz resolution class amplitude control. OEM literature rates amplitude from about minus 88.74 dBm to plus 13.01 dBm with 0.01 dB resolution, high spectral purity, and optional high stability reference. Telecommunications level generation, precision RF/AF level calibration support, synthesized frequency generation with digital sweep convenience, and lab reference tone generation. The HP/Agilent 3335A isaprecision synthesizer/level generator covering 200 Hz to 81 MHz with 1 mHz resolution class amplitude control. OEM literature rates amplitude from about minus 88.74 dBm to plus 13.01 dBm with 0.01 dB resolution, high spectral purity, and optional high stability reference. Telecommunications level generation, precision RF/AF level calibration support, synthesized frequency generation with digital sweep convenience, and lab reference tone generation. Synthesized frequency with digital sweeper convenience



MODEL

HP / Agilent 3335A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

3335A

LISTING

<https://aumictechlabs.com/products/3335a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The HP/Agilent 3335A Synthesizer/Level Generator delivers precise, stable signal generation from 200 Hz to 81 MHz with 0.001 Hz resolution. This dual-function instrument combines a synthesized signal source with programmable level control and sweep capabilities, making it ideal for telecommunications testing, R&D measurement, and production verification. The 3335A operates

as a tracking generator when paired with selective level measuring equipment, and offers exceptional frequency stability and spectral purity across its entire range. Technical Specifications Frequency Performance Range: 200 Hz to 81 MHz (standard); extended ranges available with options for 750 Hz start frequency and alternate impedances Resolution: 0.001 Hz Stability (long-term): $\pm 1 \times 10^{-10}$ /day; $\pm 1 \times 10^{-7}$ /month; $\pm 1 \times 10^{-8}$ /day with internal temperature-controlled oscillator Option 001 high-stability reference: $\pm 5 \times 10^{-8}$ /day aging rate Signal Quality Harmonic distortion: < -45 dBc (200 Hz–10 MHz); < -40 dBc (10–80 MHz) Phase noise: -63 dBc @ 9.9 MHz; -70 dBc @ 20 MHz; -64 dBc @ 40 MHz; -58 dBc @ 80 MHz Spurious signals: greater of -75 dBc or -125 dBm (50/75 Ω) Amplitude Control Output range: -86.98 to $+13.01$ dBm (50 Ω); -88.74 to $+11.25$ dBm (75 Ω) Resolution: 0.01 dB Absolute accuracy: ± 0.05 dB (50/75 Ω); ± 0.1 dB (124/135/1500 Ω) at 100 kHz Flatness: ± 0.07 dB (1 kHz–25 MHz, 50/75 Ω); ± 0.15 dB (200 Hz–80 MHz, 50/75 Ω) Attenuator accuracy: ± 0.025 dB across 81 MHz range Sweep Functions Linear sweep: 0.01 s to 99.99 s Logarithmic sweep: 2 s to 99.99 s (single); 0.1 s to 99.99 s (continuous) Phase-continuous frequency sweeping over any range Key Features Multiple output impedance options: 50 Ω , 75 Ω , 124 Ω , 135 Ω , 150 Ω , 1500 Ω HP-IB programmability per IEEE Standard 488-1975 Tracking generator compatibility with HP 3746A/B SLMS and HP 3586A/B/C selective level meters Compact form factor: 132.6 mm H $\times$ 425.5 mm W $\times$ 497.8 mm D; 10 kg net Typical Applications Telecommunications system characterization Component and subsystem testing Production acceptance testing Network analyzer source operations

3335A Characteristics / Specifications

PARAMETER	VALUE
Frequency Range	200 Hz to 81 MHz
Frequency Resolution	1 mHz
Amplitude Range Class	minus 88.74 dBm to plus 13.01 dBm
Amplitude Resolution	0.01 dB
Amplitude Absolute Accuracy Class	plus or minus 0.05 dB
Flatness 1 kHz To 25 MHz Class	plus or minus 0.07 dB
Flatness 200 Hz To 80 MHz Class	plus or minus 0.15 dB
Attenuator Accuracy 0 To 38 dB Class	plus or minus 0.025 dB
Attenuator Accuracy 40 To 58 dB Class	plus or minus 0.03 dB
Attenuator Accuracy 60 To 98 dB Class	plus or minus 0.09 dB
Frequency Stability Standard Class	plus or minus 1e-8 per day
Frequency Stability Opt 001 Class	less than 5e-10 per day
Harmonic Distortion 100 kHz To 10 MHz Class	less than minus 45 dB
Harmonic Distortion 10 To 80 MHz Class	less than minus 40 dB
Remote Interface	HP-IB
Form Factor	benchtop synthesizer/level generator
Output Type	leveled synthesized sine class
Sweep	digital sweeper class
Series Family	HP 3335A

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
Frequency Range	200 Hz to 81 MHz
Frequency Resolution	1 mHz
Amplitude Range Class	minus 88.74 dBm to plus 13.01 dBm
Amplitude Resolution	0.01 dB
Amplitude Absolute Accuracy Class	plus or minus 0.05 dB
Flatness 1 kHz To 25 MHz Class	plus or minus 0.07 dB
Flatness 200 Hz To 80 MHz Class	plus or minus 0.15 dB
Attenuator Accuracy 0 To 38 dB Class	plus or minus 0.025 dB
Attenuator Accuracy 40 To 58 dB Class	plus or minus 0.03 dB
Attenuator Accuracy 60 To 98 dB Class	plus or minus 0.09 dB
Frequency Stability Standard Class	plus or minus 1e-8 per day
Frequency Stability Opt 001 Class	less than 5e-10 per day
Harmonic Distortion 100 kHz To 10 MHz Class: less than minus 45 dB	
Harmonic Distortion 10 To 80 MHz Class: less than minus 40 dB	
Remote Interface: HP-IB	
Option 003: BNC connectors	
Specifications	
PARAMETER	VALUE
Form Factor	benchtop synthesizer/level generator
Output Type	leveled synthesized sine class
Sweep	digital sweeper class
Series Family	HP 3335A
Notes	
Numeric rows from HP 3335A synthesizer/level generator literature and calibration bulletin performance tables. Confirm Opt 001 reference and connector options on the faceplate.	

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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.