

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

HP / AGILENT

HP / Agilent 3325B Synthesizer/Function Generator

HP Agilent 3325B Synthesizer Function Generator The HP/Agilent 3325B is a synthesized function generator covering sine from 1 uHz to 20.999999999 MHz with 1 uHz resolution below 100 kHz. Published HP catalog/datasheet specifications include square to 10.999999999 MHz with less than 20 ns edges, triangle/ramps to 10.999999999 kHz, amplitude 1 mV to 10 Vpp into 50 Ω , and full HP-IB/RS-232 programmability with internal modulation source. Precision bench and ATE frequency stimulus, swept-sine network excitation, amplitude and phase modulation tests, and multi-instrument sync using rear-panel sync/auxiliary frequency outputs. The HP/Agilent 3325B is a synthesized function generator covering sine from 1 uHz to 20.999999999 MHz with 1 uHz resolution below 100 kHz. Published HP catalog/datasheet specifications include square to 10.999999999 MHz with less than 20 ns edges, triangle/ramps to 10.999999999 kHz, amplitude 1 mV to 10 Vpp into 50 Ω , and full HP-IB/RS-232 programmability with internal modulation source. Precision bench and ATE frequency stimulus, swept-sine network excitation, amplitude and phase modulation tests, and multi-instrument sync using rear-panel sync/auxiliary frequency outputs.



MODEL

HP / Agilent 3325B

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

3325B

LISTING

<https://aumictechlabs.com/products/3325b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The HP/Agilent 3325B is a dual-mode signal source combining synthesizer precision with function generator flexibility. It delivers microhertz-resolution frequency control from 1 μ Hz to 20.999 MHz (sine) and 10.999 MHz (square, triangle, ramp), making it ideal for precision testing, calibration, and automated measurement systems. The instrument generates seven waveform types with exceptional phase control ($\pm 719.9^\circ$, 0.1° resolution) and supports phase-continuous sweeps across 100 programmable segments. Harmonic distortion remains better than -65 dBc up to 50 kHz, with spurious levels reaching -70 dBc. Multi-unit phase-locking enables coherent multi-channel applications.

Technical Specifications

Frequency & Resolution Sine wave: 1 μ Hz to 20.999 MHz Square, triangle, ramps: 1 μ Hz to 10.999 MHz Sync output: DC to 60 MHz (TTL) Frequency resolution: Microhertz (μ Hz) Phase control: $\pm 719.9^\circ$ with 0.1° resolution

Waveforms & Signal Quality Sine, square, triangle, positive/negative ramps, arbitrary (ARB), DC offset Harmonic distortion (sine): <-65 dBc (≤ 50 kHz); -60 dBc (200 kHz); -40 dBc (2 MHz); -30 dBc (15 MHz); -25 dBc (20 MHz) Spurious levels: ≤ -70 dBc Square rise/fall time: ≤ 20 ns; overshoot <5%; settling <1 μ s Triangle linearity: 0.05% (≤ 10.999 kHz) Amplitude & Output DC offset: ± 5 V (typical) Amplitude accuracy: ± 200 mV (typical) Output impedance: <2 Ω (DC), <10 Ω (1 MHz) Isolated floating outputs

Modulation & Sweep Internal modulation sources: sine, square, arbitrary waveforms Sweep modes: LOG, LIN, discrete (100-segment capability) Phase-continuous sweep supported

Key Features Microhertz resolution across 20 MHz span 10 non-volatile memory locations for test setup storage Programmable modulation with internal waveform sources Exceptional phase continuity for multi-unit synchronization Self-test capability (front panel or remote) Typical Applications Precision frequency calibration, phase-coherent multi-channel testing, harmonic analysis, modulation characterization, automated test system integration, and communication system validation.

Compatibility & Integration HP-IB (IEEE-488) and RS-232 interfaces enable remote control and integration into automated test environments. Optional high-stability frequency reference (Option 001) provides $\pm 5 \times 10^{-7}$ /week aging and $\pm 1 \times 10^{-7}$ /month long-term stability.

3325B Characteristics / Specifications

PARAMETER	VALUE
Sine Frequency Range	1 uHz to 20.999999999 MHz
Square Frequency Range	1 uHz to 10.999999999 MHz
Triangle Ramp Frequency Range	1 uHz to 10.999999999 kHz
Frequency Resolution Below 100 kHz	1 uHz
Frequency Resolution At Or Above 100 kHz	1 mHz
Frequency Accuracy At Calibration 20 to 30 C	$\pm 5 \times 10^{-6}$
Warmup To Specified Accuracy	20 minutes
Amplitude Range Into 50 Ohm	1 mV to 10 Vpp in 1-3-10 ranges
Output Impedance	50 ohm
Square Rise Fall Time	less than 20 ns 10% to 90% at full output
DC Offset Range DC Only	0 to ± 5.0 V into 50 ohm
DC Offset With AC Highest Range	maximum ± 4.5 V decreasing on lower ranges
AM Depth At Full Output	0 to 100%
AM Modulation Frequency Range	DC to 400 kHz
Phase Modulation Range	± 850 degrees with ± 5 V input class
Linear Sweep Time	0.01 s to 1000 s
Log Sweep Time Single	1 s to 1000 s
Discrete Sweep Segments Maximum	100
Auxiliary Frequency Output	21 MHz to 60.999999999 MHz at 0 dBm into 50 ohm
Rear Sync Frequency Range	DC to 60 MHz TTL class
Interfaces	HP-IB and RS-232 floating

3325B Specifications

PARAMETER	VALUE
HP Agilent 3325B Synthesizer Function Generator	Overview
Internal programmable modulation source for AM and PM	Floating HP-IB and RS-232 interfaces
Technical Specifications	Sine Frequency Range: 1 uHz to 20.999999999 MHz

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 include square to 10.999999999 MHz with less than 20 ns edges, triangle/ramps to 10.999999999 kHz, amplitude 1 mV to 10 Vpp into 50 Ω, and full HP-IB/RS-232 programmability with internal modulation source.

Applications

Precision bench and ATE frequency stimulus, swept-sine network excitation, amplitude and phase modulation tests, and multi-instrument sync using rear-panel sync/auxiliary frequency outputs.

Key Features

True synthesizer frequency accuracy with microhertz resolution

Sine square triangle and positive/negative ramp waveforms

Linear log and discrete segment sweeps

Internal programmable modulation source for AM and PM

Floating HP-IB and RS-232 interfaces

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Sine Frequency Range	1 uHz to 20.999999999 MHz
Square Frequency Range	1 uHz to 10.999999999 MHz
Triangle Ramp Frequency Range	1 uHz to 10.999999999 kHz
Frequency Resolution Below 100 kHz	1 uHz
Frequency Resolution At Or Above 100 kHz	1 mHz

Frequency Accuracy At Calibration 20 to 30 C: ±5 x 10⁻⁶

Specifications

PARAMETER	VALUE
Warmup To Specified Accuracy	20 minutes
Amplitude Range Into 50 Ohm	1 mV to 10 Vpp in 1-3-10 ranges
Output Impedance	50 ohm
Square Rise Fall Time	less than 20 ns 10% to 90% at full output
DC Offset Range DC Only	0 to ±5.0 V into 50 ohm
DC Offset With AC Highest Range	maximum ±4.5 V decreasing on lower ranges
AM Depth At Full Output	0 to 100%
AM Modulation Frequency Range	DC to 400 kHz
Phase Modulation Range	±850 degrees with ±5 V input class
Linear Sweep Time	0.01 s to 1000 s
Log Sweep Time Single	1 s to 1000 s

PARAMETER	VALUE
Discrete Sweep Segments Maximum	100
Auxiliary Frequency Output	21 MHz to 60.999999999 MHz at 0 dBm into 50 ohm
Rear Sync Frequency Range	DC to 60 MHz TTL class
Interfaces	HP-IB and RS-232 floating

Option 002 High Voltage Output Frequency: 1 uHz to 1 MHz into 500 ohm class

Notes
Numeric limits from HP 3325B synthesizer/function generator datasheet and catalog excerpts. Confirm Option 001 oven and Option 002 high-voltage output on the instrument label.

Ordering Information

OPTION	DESCRIPTION
Option 002	High Voltage Output Frequency: 1 uHz to 1 MHz into 500 ohm class
Option 001	oven and Option 002 high-voltage output on the instrument label.

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 14, 2026

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