

KEYSIGHT TECHNOLOGIES (AGILENT HP)

3325A

The Keysight (Agilent HP) 3325A is a high-precision synthesized function generator and sweep generator with a frequency range extending up to 21 MHz for sine waves and 11 MHz for square waves, featuring fully programmable HP-IB controls and fractional-N synthesizer technology.

SPECIFICATIONS

General

Interfaces	HP-IB (GPIB)
Display	LED digital display (7-segment)
Instrument State Storage	10 registers (0 to 9) for saving and recalling front panel setups

Physical

Operating Temperature	0 to 55 °C °C
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Frequency Characteristics

Sine Wave Frequency Range	1 µHz to 21 MHz
Square Wave Frequency Range	1 µHz to 11 MHz
Triangle Wave Frequency Range	1 µHz to 11 kHz
Ramp Wave Frequency Range	1 µHz to 11 kHz
Frequency Accuracy	$\pm 5 \times 10^{-6}$ of setting per year (standard)

Amplitude Characteristics

Amplitude Range (Sine, 50 Ω Load)	1.000 mVpp to 10.00 Vpp
Amplitude Range (Square, 50 Ω Load)	1.000 mVpp to 10.00 Vpp
Output Units	Vpp, Vrms, dBm (sine only)
Output Impedance	50 Ω

DC Offset

DC Offset Range (DC Only)	± 5 V (50 Ω load)
DC Offset Range (AC + DC)	Peak AC + DC must be ≤ 5 V (DC offset up to ± 4.5 V)

Waveform Quality & Spectral Purity

Sine Wave Harmonic Distortion (0.1 Hz - 50 kHz)	< -65 dBc
Square Wave Rise/Fall Time	< 20 ns (10% to 90%)
Square Wave Overshoot	$< 5\%$ of peak-to-peak amplitude at full output

Phase & Modulation Characteristics

Phase Offset Control Range	±719.9° (relative to arbitrary point or external 3325A)
Phase Offset Resolution	0.1°

Sweep Capabilities

Sweep Type	Linear and Logarithmic
X-Drive Output Voltage	0 to > 10 V DC ramp

Auxiliary Inputs & Outputs

Main Output Connector	Front panel BNC
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Option 002 (High Voltage Output)

Option 002 Output Amplitude Range	4.00 mV p-p to 40.00 V p-p (into ≥ 500 Ω, ≤ 500 pF load)
Option 002 Sine/Square Frequency Range	1 μHz to 1 MHz

Phase Modulation

Phase Modulation Range	±850°
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Sweep

Sweep Continuity	Fully phase-continuous over the entire sweep range
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Frequency Reference

Standard Reference Aging Rate	< ±5 × 10 ⁻⁶ per year
Standard Reference Temperature Coefficient	< ±5 × 10 ⁻⁶ over the range 0 to 55 °C

TECHNOLOGY

Synthesizer / Function Generator

APPLICATIONS

Test and Measurement

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.