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Data Sheet

August 14, 2026

HP / AGILENT

HP / Agilent 3336C Synthesis/Level Generator

HP Agilent 3336C Synthesizer Level Generator General Purpose The HP 3336C is the general-purpose synthesizer/level generator in the 3336 family covering 10 Hz to 20.999999999 MHz with 11-digit resolution. It adds 50 ohm unbalanced output for traditional synthesizer R&D and production component testing alongside telecom-oriented siblings. Precision sine stimulus for filters amplifiers and converters, swept transfer measurements, and HP-IB automated level/frequency tests to about 21 MHz. Frequency Range: 10 Hz to 20.999999999 MHz The HP 3336C is the general-purpose synthesizer/level generator in the 3336 family covering 10 Hz to 20.999999999 MHz with 11-digit resolution. It adds 50 ohm unbalanced output for traditional synthesizer R&D and production component testing alongside telecom-oriented siblings. Precision sine stimulus for filters amplifiers and converters, swept transfer measurements, and HP-IB automated level/frequency tests to about 21 MHz. Frequency Range: 10 Hz to 20.999999999 MHz Frequency Resolution Below 100 kHz: 1 uHz



MODEL

HP / Agilent 3336C

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

3336C

LISTING

<https://aumictechlabs.com/products/3336c-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The HP/Agilent 3336C is a synthesized signal and level generator delivering precise frequency and amplitude control across R&D, production testing, and calibration applications. Built on single-loop, fractional-N synthesis architecture, It has 11 digits of frequency resolution with phase continuity across its entire range. The instrument combines low-noise signal generation with

flexible modulation and sweep capabilities, supported by HP-IB control and optional high-stability frequency reference for demanding metrology work. Technical Specifications Frequency Generation Range: 10 Hz to 20.999999999 MHz Resolution: 1 μ Hz (30 dB or >25 dB (frequency-dependent); (75 Ω): >30 dB Spectral Purity Harmonic distortion: <-60 dBc (50 Hz-1 MHz); <-50 dBc (to 20 MHz) Spurious signals: -100 dBm typical Integrated phase noise: -54 dB (30 kHz band, 20 MHz carrier, excluding 1 Hz about carrier) Modulation AM: 0-100% depth, 50 Hz-50 kHz modulation frequency, 1.2 V into 50 Ω) REF OUT: 0 dBm, 1 MHz (10 MHz temperature-stabilized crystal oscillator) AUX output: 0 dBm, 21-60.999999999 MHz External leveling input for remote amplitude control HP-IB (IEEE 488-1975) standard interface Typical Applications Radio frequency calibration, audio equipment testing, communication system validation, R&D signal characterization, production test automation. Physical & Environmental 132.6 mm (H) $\times$ 425.5 mm (W) $\times$ 497.8 mm (D); 10 kg net. Operating temperature: 0-55°C.

3336C Characteristics / Specifications

PARAMETER	VALUE
Frequency Range	10 Hz to 20.999999999 MHz
Frequency Resolution Below 100 kHz	1 uHz
Frequency Resolution Above 100 kHz	1 mHz
Frequency Digits	11
Output Impedance Unbalanced	50 Ohm and 75 Ohm
Output Level 50 Ohm Class	minus 71.23 to +8.76 dBm class
Output Level 75 Ohm Class	minus 72.99 to +7.00 dBm class
Amplitude Step	0.01 dBm
Absolute Amplitude Accuracy Class	plus or minus 0.05 dB class
Harmonics to 1 MHz Class	better than minus 60 dBc
Harmonics to 20.9 MHz Class	better than minus 50 dBc
Spurious Class	better than minus 70 dBc or minus 100 dBm
Linear Sweep Time	0.01 s to 99.99 s
AM Depth	0 to 100 percent
AM Bandwidth Class	to 50 kHz
PM Bandwidth Class	to 5 kHz
Storage Registers	10
Remote Interface	HP-IB IEEE-488
Form Factor	Benchtop synthesizer
Intended Use Class	General purpose R&D and production
Bandwidth	Class: to 50 kHz

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	10 Hz to 20.99999999 MHz
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Frequency Digits	11
Output Impedance Unbalanced	50 Ohm and 75 Ohm
Output Level 50 Ohm Class	minus 71.23 to +8.76 dBm class
Output Level 75 Ohm Class	minus 72.99 to +7.00 dBm class
Amplitude Step	0.01 dBm
Absolute Amplitude Accuracy Class	plus or minus 0.05 dB class
Harmonics to 1 MHz Class	better than minus 60 dBc
Harmonics to 20.9 MHz Class	better than minus 50 dBc
Spurious Class	better than minus 70 dBc or minus 100 dBm
Linear Sweep Time	0.01 s to 99.99 s
AM Depth	0 to 100 percent
AM Bandwidth Class	to 50 kHz
PM Bandwidth Class	to 5 kHz
Storage Registers	10
Remote Interface	HP-IB IEEE-488

Option 004 Aging Class: plus or minus 5e-8 per week class oven option literature

Option 005: High accuracy attenuator

Form Factor: Benchtop synthesizer

Intended Use Class: General purpose R&D and production

Notes

Specs from HP 3336 family synthesizer/level generator literature distinguishing 3336C general-purpose 50 ohm configuration from A/B telecom models.

Ordering Information

OPTION	DESCRIPTION
Option 004	Aging Class: plus or minus 5e-8 per week class oven option literature

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.