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Data Sheet
August 14, 2026

HP / AGILENT

HP / Agilent 3336A Synthesis/Level Generator

HP Agilent 3336A Synthesizer Level Generator CCITT The HP 3336A isasynthesizer/level generator covering 10 Hz to 20.999999999 MHz with 11-digit resolution for CCITT-oriented telecom testing. Output impedances include 75 ohm unbalanced and 150/600 ohm balanced with precision leveled amplitude. FDM carrier and voice-channel level generation, tracking source for HP 3586A selective level meters, and precision swept transfer-function stimulus. FractionalNsynthesis with phase continuous sweep The HP 3336A isasynthesizer/level generator covering 10 Hz to 20.999999999 MHz with 11-digit resolution for CCITT-oriented telecom testing. Output impedances include 75 ohm unbalanced and 150/600 ohm balanced with precision leveled amplitude. FDM carrier and voice-channel level generation, tracking source for HP 3586A selective level meters, and precision swept transfer-function stimulus. FractionalNsynthesis with phase continuous sweep Precision amplitude leveling and flatness

MODEL HP / Agilent 3336A	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU 3336A	LISTING https://aumictechlabs.com/products/3336a-2/

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The HP/Agilent 3336A is a precision synthesis/level generator delivering spectrally pure sine wave outputs across 10 Hz to 20.999 MHz with 11-digit frequency resolution. Engineered for R&D, production testing, and telecommunications applications - particularly FDM system validation - it combines phase-continuous frequency synthesis with programmable level control and exceptional frequency stability. Technical Specifications Frequency & Resolution Operating range:

10 Hz to 20.999 MHz (maximum 21 MHz) Frequency resolution: 11 digits; microhertz resolution available below 100 kHz Phase continuity across full frequency range Time base stability: 0.000005/year Optional stability (Option 804): ±5 × 10^{-7}/week; aging ±1.5 × 10^{-8}/week after 72 hours continuous operation; ambient stability ±5 × 10^{-7} maximum (0° to 55°C) Output Level Control Output range: −72.99 dBm to +7.00 dBm (standard); extendable to −88.74 dBm to +13.01 dBm with options Absolute level accuracy (100 kHz, 50/75 Ω): ±0.05 dB Output accuracy: ±0.15 dB Output impedance: 75 ohms Signal Purity Harmonic content: Below −60 dB (50 Hz to 1 MHz); below −50 dB (50 Hz to 20 MHz) Spurious signals: Below −70 dBc or −100 dBm (standard); −115 dBm with option Sweep Capability Internal phase-continuous frequency sweep Normal leveling sweep time: 0.5 seconds; fast leveling: 0.03 seconds Fast leveling flatness: ±0.15 dB (10 kHz to 20 MHz) Normal leveling flatness: ±0.15 dB (50 Hz to 1 MHz) Key Features HP-IB (IEEE 488-1975) interface for remote programming and integration into automated test systems Auxiliary output (AUX 0 dBm) extending to 60.999 999 999 MHz Sync output: TTL square wave (Vhigh > 1.2 V into 50 Ω) Reference output: 0 dBm (50 Ω) at 1 MHz, with optional 10 MHz temperature-stabilized crystal oscillator External leveling input support Electrical Power requirements: 100/120/220/240 V AC, 48–66 Hz Power consumption: 60 VA (100 VA with all options); 10 VA standby Typical Applications Frequency Division Multiplex (FDM) system testing, RF characterization, production testing, and precision signal sourcing in telecommunications and research environments.

3336A 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	75 Ohm
Output Impedance Balanced	150 Ohm and 600 Ohm
Output Level 75 Ohm Class	minus 72.99 to +7.00 dBm class
Amplitude Step	0.01 dBm
Absolute Amplitude Accuracy Top 9.99 dB Class	plus or minus 0.05 dB at 20 to 30 C class
Harmonics 50 Hz 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 class
Linear Sweep Time	0.01 s to 99.99 s
Log Sweep Time Class	2 s to 99.99 s class
AM Depth	0 to 100 percent
AM Rate Class	50 Hz to 50 kHz
PM Range Class	0 to plus or minus 850 degrees class
PM Rate Class	DC to 5 kHz
Storage Registers	10
Remote Interface	HP-IB IEEE-488
Form Factor	Benchtop synthesizer level generator

3336A Specifications

PARAMETER	VALUE
HP Agilent 3336A Synthesizer Level Generator CCITT	Overview
Technical Specifications	Frequency Range: 10 Hz to 20.999999999 MHz
Notes	Specs from HP 3336 Operating and Service Manual and 3336A/B synthesizer literature. 3336A is the CCITT impedance/connector configuration.

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

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PM Rate Class	DC to 5 kHz
Storage Registers	10
Remote Interface	HP-IB IEEE-488

Option 004: Oven reference
Option 005: High accuracy attenuator
Form Factor: Benchtop synthesizer level generator

Notes
Specs from HP 3336 Operating and Service Manual and 3336A/B synthesizer literature. 3336A is the CCITT impedance/connector configuration.

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

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