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Data Sheet

August 12, 2026

HP / AGILENT

HP / Agilent 70340A Microwave Synthesizer, 1 GHz to 20 GHz

HP / Agilent 70340A Microwave Synthesizer The 70340A is a 4-slot Modular Measurement System (MMS) microwave synthesizer covering 1 GHz to 20 GHz. Fundamental oscillators avoid subharmonics. It provides leveled RF output with pulse, FM, and logarithmic AM modulation for ATE and microwave component/receiver test. Pairing with the 70341A frequency extension module extends coverage down to 10 MHz. The 70340A is a 4-slot Modular Measurement System (MMS) microwave synthesizer covering 1 GHz to 20 GHz. Fundamental oscillators avoid subharmonics. It provides leveled RF output with pulse, FM, and logarithmic AM modulation for ATE and microwave component/receiver test. Pairing with the 70341A frequency extension module extends coverage down to 10 MHz.



MODEL

**HP / Agilent
70340A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

70340A

LISTING

<https://aumictechlabs.com/products/70340a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The HP/Agilent 70340A is a modular microwave signal synthesizer engineered for automated test equipment systems within Agilent's Modular Measurement System (MMS) architecture. Operating from 1 GHz to 20 GHz, it delivers leveled RF output with exceptional spectral purity and supports pulse and analog modulation. Optional frequency extension via the HP 70341A module expands

coverage down to 10 MHz, enabling comprehensive signal generation across microwave and lower frequency bands.

Technical Specifications

Frequency Range 1 GHz to 20 GHz (70340A standalone) 10 MHz to 20 GHz (with optional HP 70341A extension module)

Output Power Maximum: +13 dBm Leveled output: greater than +8 dBm

Leveling Accuracy ± 0.5 dB flatness at RF output (internal leveling)

Power meter and level correction enable accurate remote port extension

Spectral Purity Harmonics: < -55 dBc Spurious: < -60 dBc

Modulation Capabilities Pulse modulation with < 10 ns rise/fall times

Frequency modulation (FM) Logarithmic amplitude modulation (Log AM)

Optional internal pulse generator with variable rates, widths, and delays

Pulse modulation combined with Log AM enables realistic antenna scanning pattern simulation

Frequency Resolution 1 Hz resolution available (Option 1E8)

Key Features The 70340A integrates as a 4-slot module within Agilent's 70000-series test systems. SCPI and HP-IB programming interfaces enable automated control. Optional output step attenuator (1E1) and 3.5 mm RF connector (1E9) expand flexibility. High-fidelity pulse capabilities with sub-10 ns transitions support demanding modulation requirements. Internal leveling with remote port correction ensures consistent output flatness across distributed test configurations.

Typical Applications Microwave component characterization, antenna testing, error performance analysis, and modular ATE system integration. The pulse and AM modulation combination simulates dynamic RF environments for realistic device validation.

Compatibility & Integration Designed for seamless operation within HP/Agilent Modular Measurement System mainframes and 70000-series platforms. Direct pairing with the HP 70341A frequency extension module. Compatible with instruments including the HP 71500A microwave transition analyzer and HP 71600 Series error performance analyzers.

Features & description

From manufacturer datasheet

Features

- 4-slot MMS module form factor
- Fundamental-oscillator architecture (no subharmonics)
- Pulse, FM, and log AM modulation
- Built-in level correction for remote test-port leveling
- Optional step attenuator, internal pulse generator, and 1 Hz resolution
- Works with 70341A for 10 MHz low-end extension

Applications

- Modular ATE microwave stimulus in 70000 MMS racks
- Component and receiver test from 1 to 20 GHz
- Antenna-scan simulation using pulse plus log AM
- Extended 10 MHz to 20 GHz coverage with 70341A

70340A Characteristics / Specifications

PARAMETER	VALUE
Model	70340A
Manufacturer	HP / Agilent
Instrument Type	Microwave Synthesizer (MMS Module)
Alias	70340A; Agilent 70340A; HP 70340A; Keysight 70340A
Frequency range	1 GHz to 20 GHz
Extended range with 70341A	10 MHz to 20 GHz
Module width	4 MMS slots
Output power class	up to +13 dBm
Output level 1 to 18 GHz (catalog)	+11 dBm class
Output level 18 to 20 GHz (catalog)	+10 dBm class
Harmonics	less than -55 dBc
Spurious	less than -60 dBc
Level flatness (internal leveling)	+/-0.5 dB
Pulse rise/fall time	less than 10 ns
Modulation	pulse, FM, log AM

70340A Specifications

PARAMETER	VALUE
HP / Agilent 70340A Microwave Synthesizer	Overview
Applications	- Modular ATE microwave stimulus in 70000 MMS racks
Key Features	- 4-slot MMS module form factor
Technical Specifications	Model: 70340A

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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Modulation	pulse, FM, log AM
Option 1E1: output step attenuator Option 1E2: internal pulse generator Option 1E8: 1 Hz frequency resolution Option 1E9: 3.5 mm RF output connector	
Notes Specs from HP/Agilent 70340A modular signal generator literature. Confirm installed options (1E1/1E2/1E8/1E9) and whether a 70341A extender is present.	

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.