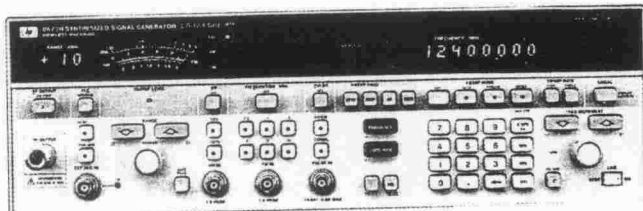


- 2 to 12.4 GHz or 5.4 to 18 GHz
- +8 to -100 dBm calibrated output
- 0.1 dB resolution, digitally displayed



HP 8673H



HP 8673H Multiband Synthesized Signal Generator

Low Price, High Performance

When full 2.0 to 26.0 GHz frequency coverage is not needed, you can choose the HP 8673H Synthesized Signal Generator with the same reliability and performance at nearly half the cost of a 2 to 26 GHz synthesizer. Choose between Option 212 (2 to 12.4 GHz) and Option 618 (5.4 to 18.0 GHz) for the frequency coverage you need. What does high performance mean? Standard on either option of the HP 8673H is AM, FM, and pulse modulation, digital sweep, millimeter-drive capability and +8 dBm output power.

Multiband Frequency Coverage for Multiple Applications

Whether your application is receiver test, component test, or frequency translation, the HP 8673H has the performance you need. For pulsed sensitivity testing of radar receivers, you can be confident that pulse shape fidelity will be maintained under all specified output power levels and pulse widths. Leveled output power to -100 dBm provides great dynamic range for sensitivity testing. Digital sweep and high output power make swept frequency component tests simple and easy. The HP 8673H allows measurement flexibility with variable sweep dwell and span. Low phase noise and wide FM deviations to 10 MHz allow for accurate signal substitution in communication systems. With the addition of the HP 83550 millimeter source modules, the HP 8673H gives you the capability to reach 110 GHz.

Drop-in Confidence

The HP 8673H is ideal for automated test systems. Minimum output power of +8 dBm (see typical output power graph on page 450) means sufficient power at the device under test even after losses through switches and cables. For systems that use proven software for an HP 8673 synthesizer, the HP 8673H is a drop-in replacement.

Reliability You Can Count On

Acquisition cost is an important factor in any purchase decision. But what about cost-of-ownership? As a member of the field-proven HP 8673 family, the HP 8673H comes to you with an estimated 20,000 hours mean time between failure (based on component warranty failure rates). To guarantee that the first three years of your HP 8673H are worry-free, Option W30 provides three years of return-to-HP service.

HP 8673H Specifications

Frequency Characteristics

Range: 2.0 to 12.4 GHz (Option 212)

5.4 to 18.0 GHz (Option 618)

Resolution: 2.0 to 6.6 GHz: 1 kHz (Band 1)

6.6 to 12.3 GHz: 2 kHz (Band 2)

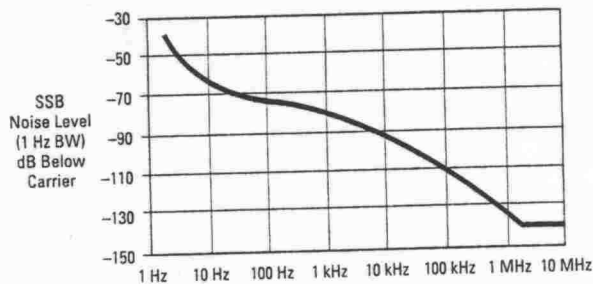
12.3 to 18.0 GHz: 3 kHz (Band 3)

- AM/FM/Pulse Modulation
- Low spurious and phase noise
- Digital sweep

Spectral Purity

Single-sideband phase noise (1 Hz BW, 1 kHz offset, CW mode):

F _c	Offset from F _c				
	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz
Band 1	-58 dBc	-70 dBc	-78 dBc	-86 dBc	-110 dBc
Band 2	-52 dBc	-64 dBc	-72 dBc	-80 dBc	-104 dBc
Band 3	-48 dBc	-60 dBc	-68 dBc	-76 dBc	-100 dBc



Typical HP 8673H single-sideband phase noise performance using the internal high stability time base, Band 1.

Harmonics (< 0 dBm; +15° C to +35° C): < -40 dBc
Subharmonics and multiples thereof: ≤ -25 dBc

Output Characteristics

Output level (+15° C to +35° C): +8 to -100 dBm

Resolution: 0.1 dB

Pulse Modulation

ON/OFF ratio: > 80 dB

Rise/fall times: < 35 ns

Pulse repetition frequency: 50 Hz to 1 MHz

Minimum duty cycle: < 0.0001 for leveled performance

Amplitude Modulation

Depth: 0 to 75%, at 0 dBm maximum carrier level, +15° C to +35° C

Rate (30% depth): 10 Hz to 100 kHz, ± 3 dB

Sensitivity: 30%/Volt and 100%/Volt ranges

Frequency Modulation

Deviation Range **Rate (± 3 dB BW, typical)** **Maximum Peak Deviation**

30, 100 kHz/V 100 Hz to 10 MHz The smaller of 10 MHz or:

0.3, 1, 3 MHz/V 1 kHz to 10 MHz fmod × 5, Band 1

10 MHz/V 1 kHz to 10 MHz fmod × 10, Band 2

fmod × 15, Band 3

General

Digital sweep characteristics: Identical to HP 8673B

Remote programming: All functions HP-IB programmable except line switch.

Operating temperature range: 0 to +55° C

Power: 100, 120, 220, 240V, +5%, -10%: 48 to 66 Hz; 400 VA max

Weight: Net, 29 kg (64 lb); shipping, 34.5 kg (76 lb)

Size: 146 H × 425 W × 620 mm D (5.7 in × 16 in × 24.4 in)

Ordering Information

HP 8673H Synthesized Signal Generator

Opt 212 or Option 618

Opt 004 Rear Panel RF Output

Opt 006 Chassis Slide Kit

Opt 907 Front Panel Handle Kit (5062-3989)

Opt 908 Rack Mounting Flange Kit (5062-3977)

Opt 909 Front Panel & Rackmounting Kits

(5062-3983)

Opt 915 Service Manual (08673-90114), (08673-09116),

(08673-60097)

Opt 916 Extra Operating Manual (08673-90119)

Opt W30 Extended Repair Service. See page 671.

Price

\$24,500

+ \$75

+ \$75

+ \$55

+ \$33

+ \$80

+ \$65

+ \$20

+ \$575

