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Data Sheet
August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 8671A Microwave Synthesizer Generator

HP Agilent Keysight 8671A Microwave Frequency Synthesizer 2.0 to 6.2 GHz The HP/Agilent 8671A isamicrowave frequency synthesizer covering 2.0 to 6.199999 GHz. OEM 8671A/8672A literature describes four phase-locked loops generatingafundamental 2.0 to 6.2 GHz YIG-tuned output with FM capability andaspecified minimum output of plus 8 dBm. Microwave LO substitution, 2 to 6.2 GHz component stimulus, and FM-capable synthesized CW sources without the 8672A leveled attenuator chain. Fundamental 2.0 to 6.2 GHz YIG synthesizer without YIG-tuned multiplier tracking The HP/Agilent 8671A isamicrowave frequency synthesizer covering 2.0 to 6.199999 GHz. OEM 8671A/8672A literature describes four phase-locked loops generatingafundamental 2.0 to 6.2 GHz YIG-tuned output with FM capability andaspecified minimum output of plus 8 dBm. Microwave LO substitution, 2 to 6.2 GHz component stimulus, and FM-capable synthesized CW sources without the 8672A leveled attenuator chain. Fundamental 2.0 to 6.2 GHz YIG synthesizer without YIG-tuned multiplier tracking Shared loop architecture with 8672A through 6.2 GHz

MODEL **Agilent / Keysight 8671A**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **8671A**	LISTING **https://aumictechlabs.com/products/8671a-2/**

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NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 8671A is a microwave synthesizer generator delivering precise, stable signal generation across 2.0 to 6.2 GHz. Built for demanding test applications including LO injection, radar testing, satellite communications, and component characterization, it combines 1 kHz frequency resolution with exceptional spectral purity and low phase noise.Technical Specifications Frequency Performance Frequency range: 2.0 GHz to 6.2 GHz Frequency steps: 1 kHz increments Output power (unleveled): Minimum +8 dBm (specified +15 to +35°C) Flatness: < 6 dB total variation across full band Harmonic content: 80 dB ON/OFF ratio; 70 dB below carrier Non-harmonically related spurious: < -60 dBc (10 MHz–1.999999 GHz) Excellent phase noise and spectral purity Time Base & Stability 10 MHz time base aging: < 5×10^{-10}/dayKey Features HP-IB programmable for remote control of all functions except line switches and meter mode Unleveled output architecture - no automatic amplitude leveling Operating temperature: 0 to +55°C; calibrated performance +15 to +35°C Compact form factor: 222 mm (H) × 425 mm (W) × 620 mm (D); 24 kg netTypical Applications Local oscillator (LO) generation for microwave receivers Radar system testing and characterization Satellite communications signal simulation Microwave component testing and measurementCompatibility & Integration The 8671A operates identically to the 8672A across the overlapping 2.0–6.2 GHz range. For applications requiring leveled output or extended frequency coverage, the 8671B and 8672A models are available alternatives.

8671A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Microwave frequency synthesizer
Series Family	HP Agilent 8671A/8672A
Frequency Range	2.0 to 6.199999 GHz
Frequency Coverage Nominal	2.0 to 6.2 GHz
Minimum Output Power	plus 8 dBm
Output Impedance	50 ohm
Modulation Types	FM
Architecture	four phase-locked loops plus YIG-tuned oscillator
Reference Loop	generates basic signals for the other loops
LFS Loop	four least significant digits of the fundamental frequency
MN Loop	three most significant digits of the fundamental frequency
RF Output Path	YTO through circulator to front panel
YTM Tracking	not required (no YIG-tuned multiplier)
PEAK NORM Adjustment	not present (unlike 8672A)
Remote Interface	HP-IB
Form Factor	benchtop microwave synthesizer
Programming	front panel or rear HP-IB
Operating Context	microwave LO and CW stimulus
Power	mains powered
Brand Lineage	HP / Agilent
Related Generator	8672A adds 2 to 18 GHz coverage and calibrated AM/FM level
Frequency Resolution Class	synthesizer digits set by LFS and M/N loops
Spectral Purity Class	phase-locked YIG with loop-optimized SSB phase noise
Output Connector Class	front panel microwave connector
Calibration Note	exact resolution, residual FM, and harmonic limits belong on the 8671A operating manual specification table

PARAMETER	VALUE
External Reference Class	internal quartz reference loop
Operating Temperature Class	laboratory microwave environment
Leveled Attenuator	not the 8672A plus 3 to minus 120 dBm chain
Operating temperature	Class: laboratory microwave environment

General Specifications & Supplementary Characteristics

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Leveled Attenuator	not the 8672A plus 3 to minus 120 dBm chain Notes Numeric frequency and plus 8 dBm minimum output are from HP 8671A/8672A operating literature. The 8671A RF output assembly delivers 2.0 to 6.199999 GHz with FM. Finer SSB phase noise and harmonic tables belong on the 8671A specification section of the operating manual.

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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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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