KEYSIGHT TECHNOLOGIES (AGILENT HP)

8672A

The HP Keysight 8672A is a classic synthesized signal generator covering the 2.0 to 18.0 GHz range. Featuring exceptionally flat, leveled RF output power and high spectral purity, it provides versatile AM, FM, and remote programmability via HP-IB, making it a reliable standard for microwave test and measurement applications.

SPECIFICATIONS

Frequency

Minimum Frequency	2.0 GHz Hz
Maximum Frequency	18.0 GHz Hz
Frequency Resolution	1 kHz, 2 kHz, or 3 kHz (band-dependent); front-panel selectable steps of 100 MHz, 1 MHz, 10 kHz, or 1 kHz

Modulation

Modulation	AM, FM

General

Reference Oscillator	Internal 10 MHz crystal reference oscillator; External 5 or 10 MHz reference input
Interfaces	HP-IB (IEEE-488)
Display	LED digital display for frequency; Analog meter for output level and modulation indicators

Frequency Specifications

Frequency Range	2.0 to 18.0 GHz (usable to 18.599997 GHz)
Frequency Resolution (2.0 to 6.2 GHz)	1 kHz
Frequency Resolution (6.2 to 12.4 GHz)	2 kHz
Frequency Resolution (12.4 to 18.0 GHz)	3 kHz
Tuning Resolution Steps	100 MHz, 1 MHz, 10 kHz, 1 kHz (selectable)
Internal Reference Oscillator	10 MHz
External Reference Input Requirements	5 or 10 MHz

Amplitude and Output Power

Output Leveling Control	Internal Automatic Leveling Control (ALC) or External Leveling
External Leveling Sensors	Diode detector or Power meter

Spectral Purity

Non-Harmonic Spurious (2.0 to 6.2 GHz)	<-70 dBc
Non-Harmonic Spurious (6.2 to 12.4 GHz)	<-64 dBc
Non-Harmonic Spurious (12.4 to 18.0 GHz)	<-60 dBc
Power Line Spurious	< -55 dBc (2.0 to 6.2 GHz); < -49 dBc (6.2 to 12.4 GHz); < -46 dBc (12.4 to 18.0 GHz) at up to 5 kHz offset

Modulation Characteristics

AM Modulation Source	External drive signal required
AM Depth Ranges	30% and 100% full scale
AM External Input Level for Full Scale	1.0 V peak (linear response)
FM Modulation Source	External drive signal required
FM Peak Deviation Ranges	6 selectable ranges (0.03, 0.1, 0.3, 1, 3, and 10 MHz)
FM External Input Level for Full Scale	1.0 V peak (linear response)

Front and Rear Panel Interfaces

RF Output Connector	Type-N female
RF Output Impedance	50 ohms nominal

Remote Control and Programming

Remote Programming Interface	HP-IB (IEEE-488)

TECHNOLOGY

Synthesized Signal Generation

APPLICATIONS

Microwave RF signal generation, receiver testing, and local oscillator substitution