

KEYSIGHT TECHNOLOGIES (AGILENT HP)

83732B

The Keysight (Agilent/HP) 83732B is a high-performance synthesized signal generator designed to provide precise, low-noise signals in the RF and microwave frequency bands. Covering a broad frequency range from 10 MHz to 20 GHz, it is optimized for rigorous testing applications including radar, electronic warfare (EW) receiver testing, and satellite communications. The instrument features comprehensive modulation capabilities—including pulse, frequency, phase, and scan modulation—and delivers high output power while maintaining excellent spectral purity.

SPECIFICATIONS

Frequency

Minimum Frequency	10 MHz Hz
Maximum Frequency	20 GHz Hz
Frequency Resolution	1 kHz

Output

Maximum Output Power	+10 dBm dBm
Output Power Range	-4 dBm to +10 dBm

Modulation

Modulation	AM, FM, Phase, Pulse
Sweep Modes	Step, List
Pulse Modulation On/Off Ratio	> 80 dB

General

Reference Oscillator	10 MHz (Option 1E5 for high stability)
Interfaces	GPIO (IEEE-488.2)

Physical

Power Supply	90 to 132 or 198 to 264 VAC, 50 to 400 Hz, 400 VA maximum
Dimensions (W×H×D)	426 × 133 × 498 mm
Weight	16 kg

Frequency Specifications

Frequency Range	10 MHz to 20 GHz
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Amplitude and Output Power

Typical Maximum Output Power	>+14 dBm
Minimum Output Power	-4 dBm
Output Impedance	50 Ω

Spectral Purity

Harmonics	-55 dBc
Non-harmonics (Spurious)	-60 dBc

Modulation Specifications

Modulation Modes Supported	AM, Frequency (FM), Phase, Pulse
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Inputs & Outputs

RF Output Connector	3.5 mm (male)
External Reference Input	1, 2, 2.5, 5, or 10 MHz
External ALC Input	Supports External Detector or Power Meter Leveling

Environmental

Operating Temperature	0 to 55 °C
Storage Temperature	-40 to 71 °C

Compliance

EMC Compliance	CISPR Pub 11 Group 1 Class A; EN 50082-1
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Performance

Amplitude Resolution	0.01 dB
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Options

Option 1E1	Adds 110 dB step attenuator
Option 1E5	High-stability timebase
Option 1E8	1 Hz frequency resolution

TECHNOLOGY

Synthesized RF / Microwave

APPLICATIONS

Radar and EW receiver testing, satellite application simulation, scanning antenna simulation, and communications data simulation.

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.