

KEYSIGHT TECHNOLOGIES (AGILENT HP)

83630B

The Keysight / Agilent 83630B is a synthesized swept-signal generator that sets a standard of excellence for applications requiring the high performance and accuracy of a synthesized source, combined with the speed and versatility of a sweep oscillator. It leverages indirect synthesis to deliver broad frequency coverage up to 26.5 GHz, excellent harmonic performance, and low single-sideband phase noise. As part of the 8360B series, it includes built-in pulse, amplitude, and frequency modulation capabilities.

SPECIFICATIONS

General

Interfaces	GPIO (IEEE-488)
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Physical

Power Supply	100 / 120 / 220 / 240 Vac ($\pm 10\%$), 48-66 Hz (100/120 V also supports 400 Hz); 400 VA max
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Operating Temperature	0 to 55 °C
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Dimensions (W×H×D)	425 × 178 × 648 mm
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Weight	27.2 kg
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Frequency Specifications

Frequency Range	10 MHz - 26.5 GHz
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Frequency Resolution	1 kHz (Standard) / 1 Hz (Option 008)
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Internal Reference Frequency	10 MHz
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RF Output Power

Minimum Settable Power	-20 dBm (Standard) / -110 dBm (Option 001)
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Spectral Purity

SSB Phase Noise	<-80 dBc/Hz (at 10 GHz and 10 kHz offset)
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Modulation

Supported Modulations	Pulse (PM), Amplitude (AM), Frequency (FM)
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Pulse Modulation On/Off Ratio	> 80 dB
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Connectivity and Interfaces

RF Output Connector	3.5 mm (male)
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Options and Configurations

Option 001	Step Attenuator (enables -110 dBm output power)
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Option 008	1 Hz Frequency Resolution
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RF Output

Output Impedance	50 Ω
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Power

Amplitude Resolution	0.02 dB
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Environmental

Storage Temperature	-40 °C to +75 °C
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Options

Option 002	Internal Modulation Generator
Option 006	Fast Pulse Modulation
Option 700	MATE System Compatibility
Option 004	Rear Panel RF Output

Sweep

Sweep Time (Ramp)	10 ms to 100 s
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Frequency

Reference Oscillator Aging Rate	< 5 × 10 ⁻¹⁰ / day
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TECHNOLOGY

Synthesized Swept-Signal Generation

APPLICATIONS

RF and Microwave Component Test, Radar/EW Simulation, LO Substitution

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