

KEYSIGHT TECHNOLOGIES (AGILENT HP)

83623L

The Keysight (Agilent/HP) 83623L is a synthesized swept-CW generator belonging to the 8360L series. Known for combining the performance and accuracy of a synthesized source with the speed and capabilities of an analog sweep oscillator, it is designed for demanding test and measurement applications up to 20 GHz.

SPECIFICATIONS

General

Interfaces	GPIO (HP-IB, IEEE 488.2), SCPI compatible
Display	Vacuum fluorescent display (VFD)
Programming Language Compatibility	SCPI, HP 8340/41 emulation

Physical

Power Supply	90–132 VAC / 198–264 VAC, 48–66 Hz
Operating Temperature	0 to 55 °C °C
Dimensions (W×H×D)	425 mm × 178 mm × 648 mm mm
Weight	27 kg kg

Frequency

Frequency Range	10 MHz to 20 GHz
Frequency Resolution	1 Hz
Internal Reference Oscillator Frequency	10 MHz
External Reference Input Frequency	10 MHz

Amplitude and Output Power

Maximum Calibrated Output Power	+15 dBm
Minimum Output Power (Standard)	-20 dBm
Minimum Output Power (with Option 001)	-110 dBm
Output Impedance	50 Ω

Spectral Purity

Harmonics	< -25 dBc (2 to 20 GHz), < -30 dBc (10 MHz to 2 GHz)
SSB Phase Noise	<-80 dBc/Hz (at 10 GHz, 10 kHz offset)

Sweep Capabilities

Sweep Capabilities	Step and list sweep
Sweep Modes	Step Sweep, List Sweep

Configurations and Ordering Options

Option 001	Step Attenuator (extends level down to -110 dBm)
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Performance

Frequency Switching Time	< 50 ms (standard), < 15 ms (with Option 008)
Level Resolution	0.1 dB
Non-harmonic Spurious	< -50 dBc (10 MHz to 2 GHz), < -60 dBc (2 to 20 GHz)
Level Flatness	±0.7 dB

Connectors

RF Output Connector	3.5 mm male
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Options

Option 004	Rear panel RF output
Option 008	Fast frequency switching

Environmental

Storage Temperature	-40 to +75 °C
Operating Altitude	Up to 4,570 m
Storage Altitude	Up to 15,240 m
Operating Humidity	95% RH at 40 °C (non-condensing)

Reference Oscillator

Reference Oscillator Aging Rate	< 1 x 10 ⁻⁹ /day
Reference Oscillator Temperature Stability	< 2 x 10 ⁻¹⁰ /°C

Inputs & Outputs

External Reference Output Frequency	10 MHz
External Reference Output Level	0 dBm (nominal)

TECHNOLOGY

Synthesized RF Generator

APPLICATIONS

RF and Microwave Test, Swept-CW Measurement

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