

KEYSIGHT TECHNOLOGIES (AGILENT HP)

E8247C-520

The Keysight (Agilent) E8247C-520 is a high-performance continuous wave (CW) signal generator operating from 250 kHz to 20 GHz. Part of the PSG family, it is designed for demanding test and measurement applications such as local oscillator (LO) substitution, low-jitter clock substitution, and interference signal generation. It offers premium phase noise and level accuracy, and features advanced sweep capabilities for automated testing.

SPECIFICATIONS

General

Interfaces	GPIB (IEEE-488.2), RS-232, 10Base-T LAN
Display	LCD
System Compatibility	Agilent 8757D Scalar Network Analyzer

Physical

Power Supply	100-120 VAC 50/60/400 Hz; 220-240 VAC 50/60 Hz; 500 W max
Operating Temperature	0 to 55 °C
Dimensions (W×H×D)	178 × 426 × 515 mm
Weight	22 kg

Frequency Specifications

Frequency Range	250 kHz to 20 GHz
Frequency Resolution	0.001 Hz
Internal Reference Frequency	10 MHz
External Reference Input Frequency Range	1, 2, 2.5, 5, 10 MHz

Amplitude Specifications

Output Impedance	50 Ω nominal
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Sweep Specifications

Sweep Types	Step, List, Ramp
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Connectivity and Interfaces

RF Output Connector Type	3.5 mm (m)
10 MHz Reference Input	BNC (f)
10 MHz Reference Output	BNC (f)
Remote Control Interfaces	GPIB, RS-232, 10Base-T LAN

Output Power

Minimum Leveled Output Power	-20 dBm (standard) / -135 dBm (with Option 1E1 Step Attenuator)
Power Level Resolution	0.01 dB
Maximum Leveled Output Power (250 kHz to 3.2 GHz)	+11 dBm (Standard) / +15 dBm (Option 1EA)
Maximum Leveled Output Power (3.2 GHz to 20 GHz)	+13 dBm (Standard) / +16 dBm (Option 1EA)
Absolute Level Accuracy (250 kHz to 2 GHz, >-70 dBm)	±0.6 dB
Absolute Level Accuracy (2 GHz to 20 GHz, >-70 dBm)	±0.8 dB

Performance

Frequency Switching Speed	< 15 ms (typical)
Phase Offset Resolution	0.1°

Environmental

Storage Temperature	-40 to 71 °C
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Spectral Purity

Harmonics (250 kHz to 2 GHz, <+10 dBm)	<-30 dBc
Harmonics (2 GHz to 20 GHz, <+10 dBm)	<-55 dBc
Sub-harmonics (10 GHz to 20 GHz)	<-50 dBc
Non-harmonics / Spurious (250 kHz to 2 GHz, >10 kHz offset)	<-65 dBc
Non-harmonics / Spurious (2 GHz to 20 GHz, >10 kHz offset)	<-58 dBc

TECHNOLOGY

RF & Microwave

APPLICATIONS

Signal Generation, LO Substitution, Clock Substitution, Component Test

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