

KEYSIGHT TECHNOLOGIES (AGILENT HP)

E8267D-520

The Keysight Technologies (formerly Agilent) E8267D PSG Vector Signal Generator with Option 520 delivers premium metrology-grade vector signal generation from 250 kHz up to 20 GHz. Widely used for advanced component, receiver, and systems testing in aerospace, defense, radar, and broadband communications, Option 520 provides the foundation for high-fidelity microwave IQ modulation with exceptional phase noise performance, high output power, and flexible modulation formats.

SPECIFICATIONS

Frequency

Minimum Frequency	250 kHz Hz
Maximum Frequency	20 GHz Hz
Frequency Resolution	0.01 Hz

Output

Maximum Output Power	+11 dBm (+18 dBm with Option 1EA) dBm
Output Power Range	-130 to +11 dBm (-130 to +18 dBm with Option 1EA)
Phase Noise	-116 dBc/Hz @ 10 kHz offset, 3.2 GHz carrier

Modulation

Modulation	AM, FM, Phase, Pulse, Vector I/Q
Sweep Modes	Step sweep, list sweep

General

Reference Oscillator	10 MHz internal reference
Interfaces	GPIB, LAN, USB 2.0
Display	Color LCD

Physical

Power Supply	90 to 267 VAC, 47 to 844 Hz
Dimensions (W×H×D)	178 mm H x 426 mm W x 515 mm D mm

Frequency Specifications

Frequency Range	250 kHz to 20 GHz
Frequency Switching Speed	< 9 ms (< 5 ms typical)
Phase Offset Resolution	0.1° increments (nominal)
Internal Reference Aging Rate	< ±1.5 x 10 ⁻⁷ /year (standard), < ±5 x 10 ⁻¹⁰ /day (Option UNX/ UNY)
External Reference Input Frequency	1 to 50 MHz (in multiples of 0.1 Hz)
External Reference Input Amplitude	-5 to +20 dBm (typical)

Amplitude Specifications

Maximum Leveled Output Power (250 kHz to 250 MHz)	+15 dBm
Maximum Leveled Output Power (250 MHz to 3.2 GHz)	+15 dBm from 250 MHz to 2 GHz, +11 dBm from 2 to 3.2 GHz
Maximum Leveled Output Power (3.2 to 20 GHz)	+11 dBm (+18 dBm with Option 1EA)
Minimum Leveled Output Power	-130 dBm (standard with step attenuator)
Amplitude Resolution	0.01 dB
Output Impedance	50 Ohms (nominal)
Maximum Reverse Power	2 Watts (33 dBm) CW, 0 VDC
Attenuator Range	115 dB in 5 dB steps

Spectral Purity

Harmonics	<-30 dBc (at or below 3 GHz)
Non-Harmonics (Spurious)	<-62 dBc (at or below 10 GHz)
SSB Phase Noise at 10 GHz (10 kHz offset)	-106 dBc/Hz (standard), -118 dBc/Hz (Option UNY)

Analog Modulation

Frequency Modulation (FM) Maximum Deviation	20 MHz (typical at 20 GHz)
Frequency Modulation (FM) Rate Range	DC to 10 MHz (3 dB bandwidth)
Phase Modulation (PM) Maximum Deviation	80 rad (at 20 GHz in normal mode)
Phase Modulation (PM) Rate Range	DC to 1 MHz (3 dB bandwidth)
Amplitude Modulation (AM) Depth Range	0 to 90%
Amplitude Modulation (AM) Rate Range	DC to 100 kHz (3 dB bandwidth)
Pulse Modulation On/Off Ratio	> 80 dB
Pulse Modulation Minimum Pulse Width	150 ns (20 ns with Option UNW)

Vector Modulation and Baseband

Internal Baseband Generator Bandwidth	80 MHz RF bandwidth (Option 601/602)
Arbitrary Waveform Memory Depth	64 MSamples (Option 602)
Waveform Sampling Rate	100 MSa/s
DAC Resolution	16-bit
External I/Q Modulation Bandwidth	160 MHz RF bandwidth (typical, standard I/Q inputs)
Wideband External I/Q Bandwidth	Up to 2 GHz RF bandwidth (with Option 016)
External I/Q Input Impedance	50 Ohms (nominal)

Sweep and Operating Modes

Step/List Sweep Dwell Time Range	100 μ s to 99 s
Number of Step Sweep Points	2 to 65535

System Connectivity and Interfaces

RF Output Connector Type	Precision 3.5 mm male
External Reference Input Connector	BNC female (rear panel)
Reference Output Connector	BNC female (rear panel)
Trigger Input/Output Connectors	BNC female (rear panel)

Physical and Environmental Specifications

Operating Temperature Range	0 to 55 °C
Storage Temperature Range	-40 to 70 °C
Relative Humidity Range	Up to 95% at 40 °C (non-condensing)
Maximum Operating Altitude	4,600 meters (15,000 feet)
Rack Unit Height	4 RU

Power Requirements

Power Consumption	< 650 Watts
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TECHNOLOGY

Vector Signal Generator

APPLICATIONS

Aerospace, defense, radar, electronic warfare, broadband wireless communication, and satellite receiver testing

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