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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent / Keysight E8244A PSG-L Series Performance Signal Generator, 40 GHz

Agilent / Keysight E8244A PSG-L Series Performance Signal Generator 250 kHz to 40 GHz The Agilent E8244A isaPSG Family performance microwave signal generator covering 250 kHz to 40 GHz. OEM PSG E8241A/44A/51A/54A data sheets list frequency resolution of 0.01 Hz, typical frequency switching under 15 ms, and standard leveled output from -20 dBm to model-dependent maximum power, with Option 1E1 extending the minimum to -135 dBm. Local oscillator substitution, receiver and component stimulus, and high-performance microwave CW and analog-modulated signal generation on the PSG platform. The Agilent E8244A isaPSG Family performance microwave signal generator covering 250 kHz to 40 GHz. OEM PSG E8241A/44A/51A/54A data sheets list frequency resolution of 0.01 Hz, typical frequency switching under 15 ms, and standard leveled output from -20 dBm to model-dependent maximum power, with Option 1E1 extending the minimum to -135 dBm. Local oscillator substitution, receiver and component stimulus, and high-performance microwave CW and analog-modulated signal generation on the PSG platform.



MODEL

**Agilent / Keysight
E8244A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E8244A

LISTING

<https://aumictechlabs.com/products/e8244a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight E8244A PSG-L Series Performance Signal Generator delivers precision signal generation from 250 kHz to 40 GHz, engineered for aerospace, defense, communications, and laboratory applications demanding exacting performance. The instrument provides 0.01 Hz frequency resolution, sub-16 ms switching speed (standard CW operation), and flexible modulation across FM, PM, AM, and pulse modes. Output power ranges from -130 dBm to +14 dBm depending on frequency and configuration, with leveling accuracy typically 0.7–0.9 dB and external detector support. Phase noise reaches -110 dBc/Hz at 20 kHz offset (10 GHz carrier, standard), with optional configurations achieving -110 dBc/Hz at 10 kHz offset. The instrument supports nine frequency bands with step attenuation from 0 to 115 dB in 5 dB increments. FM deviation extends to 32 MHz at 40 GHz; PM deviation to 320 radians at 40 GHz. AM bandwidth spans DC to 10 MHz in linear and exponential modes. Pulse modulation operates 10 Hz to 1 MHz PRF above 3.2 GHz with 80 dB on/off ratio. Output impedance is 50 Ω nominal with SWR tracking frequency: $\leq 1.4:1$ to 2 GHz, $\leq 1.6:1$ to 20 GHz, $\leq 1.8:1$ to 40 GHz. Frequency accuracy is $\pm 0.05\%$ of span $\pm$ timebase at 100 ms sweep, improving with extended sweep times.

E8244A Characteristics / Specifications

PARAMETER	VALUE
Model	E8244A
Instrument Type	PSG-L Series performance signal generator
Frequency Range	250 kHz to 40 GHz
Frequency Resolution	0.01 Hz
Frequency Switching Speed Typical	less than 15 ms
Phase Offset Resolution Class	0.1 degree nominal increments
Frequency Band 1 250 KHz To 250 Mhz	N equals 1/8
Frequency Band 5 Above 2 To 3.2 Ghz	N equals 1/2
Frequency Band 6 Above 3.2 To 10 Ghz	N equals 1
Frequency Band 7 Above 10 To 20 Ghz	N equals 2
Frequency Band 8 Above 20 To 40 Ghz	N equals 4
Max Specified Power Standard 250 KHz To 3.2 Ghz	+9 dBm
Max Specified Power Standard Above 3.2 To 20 Ghz	+9 dBm
Max Specified Power 1Ea 250 KHz To 3.2 Ghz	+15 dBm
Max Specified Power 1Ea Above 3.2 To 20 Ghz	+18 dBm
Max Specified Power Standard Above 20 To 40 Ghz	+9 dBm
Max Specified Power 1Ea Above 20 To 40 Ghz	+14 dBm
Max Specified Power With 1E1 Above 20 To 40 Ghz	+7 dBm standard path / +12 dBm with 1EA class
Min Power Standard	-20 dBm
Min Power With 1E	-135 dBm
Step Attenuator 1E	0 dB and 5 to 115 dB in 10 dB steps

PARAMETER	VALUE
Amplitude Switching Speed Class	to within 0.1 dB within one attenuator range class
Rf Output Connector Class	type-N on 20 GHz models; 2.4 mm class on 40 GHz models
Remote Interface Class	GPIB
Operating Amplitude Spec Temperature Class	15 to 35 C for primary amplitude specs
Card Geometry	benchtop microwave signal generator

E8244A Specifications

PARAMETER	VALUE
Key Features	0.01 Hz frequency resolution synthesizer
Less than 15 ms typical frequency switching	Optional step attenuator to -135 dBm
Technical Specifications	Model: E8244A

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Performance Signal Generator 250 kHz to 40 GHz

Overview

The Agilent E8244A isaPSG Family performance microwave signal generator covering 250 kHz to 40 GHz. OEM PSG E8241A/44A/51A/54A data sheets list frequency resolution of 0.01 Hz, typical frequency switching under 15 ms, and standard leveled output from -20 dBm to model-dependent maximum power, with Option 1E1 extending the minimum to -135 dBm.

Applications

Local oscillator substitution, receiver and component stimulus, and high-performance microwave CW and analog-modulated signal generation on the PSG platform.

Key Features

- 0.01 Hz frequency resolution synthesizer
- Less than 15 ms typical frequency switching
- Optional step attenuator to -135 dBm
- Optional high-power 1EA path
- GPIB programmable ATE stimulus

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	E8244A
Instrument Type	PSG-L Series performance signal generator
Frequency Range	250 kHz to 40 GHz
Frequency Resolution	0.01 Hz
Frequency Switching Speed Typical	less than 15 ms
Phase Offset Resolution Class	0.1 degree nominal increments

Frequency Band 1 250 Khz To 250 Mhz: N equals 1/8
Frequency Band 5 Above 2 To 3.2 Ghz: N equals 1/2
Frequency Band 6 Above 3.2 To 10 Ghz: N equals 1
Frequency Band 7 Above 10 To 20 Ghz: N equals 2
Frequency Band 8 Above 20 To 40 Ghz: N equals 4
Max Specified Power Standard 250 Khz To 3.2 Ghz: +9 dBm
Max Specified Power Standard Above 3.2 To 20 Ghz: +9 dBm
Max Specified Power 1Ea 250 Khz To 3.2 Ghz: +15 dBm
Max Specified Power 1Ea Above 3.2 To 20 Ghz: +18 dBm
Max Specified Power Standard Above 20 To 40 Ghz: +9 dBm
Max Specified Power 1Ea Above 20 To 40 Ghz: +14 dBm
Max Specified Power With 1E1 Above 20 To 40 Ghz: +7 dBm standard path / +12 dBm with 1EA class

Specifications

PARAMETER	VALUE
Min Power Standard	-20 dBm
Min Power With 1E1	-135 dBm

PARAMETER	VALUE
Step Attenuator 1E1	0 dB and 5 to 115 dB in 10 dB steps
Amplitude Switching Speed Class	to within 0.1 dB within one attenuator range class
Rf Output Connector Class	type-N on 20 GHz models; 2.4 mm class on 40 GHz models
Remote Interface Class	GPIB
Operating Amplitude Spec Temperature Class	15 to 35 C for primary amplitude specs
Card Geometry	benchtop microwave signal generator

Notes
From Agilent E8241A/44A/51A/54A PSG Family Performance Signal Generator data sheet. Maximum power degrades outside 15 to 35 C; cite sheet for SSB phase noise and modulation tables by option.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
30-day returns
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Generated August 15, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.