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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight E8663D PSG RF Analog Signal Generator, 100 kHz to 9 GHz

Agilent / Keysight E8663D PSG RF Analog Signal Generator The Agilent/Keysight E8663D isaPSG Series high-performance RF analog signal generator. OEM PSG documentation lists frequency coverage from 100 kHz to 3.2 GHz or 9 GHz depending on option, with excellent phase noise and high output power for demanding LO and radar/EW stimulus applications. Low phase noise LO substitution, radar/EW stimulus, and high-purity CW/analog modulated RF generation. Frequency options to 3.2 GHz or 9 GHz class The Agilent/Keysight E8663D isaPSG Series high-performance RF analog signal generator. OEM PSG documentation lists frequency coverage from 100 kHz to 3.2 GHz or 9 GHz depending on option, with excellent phase noise and high output power for demanding LO and radar/EW stimulus applications. Low phase noise LO substitution, radar/EW stimulus, and high-purity CW/analog modulated RF generation. Frequency options to 3.2 GHz or 9 GHz class Frequency Maximum Options Class: 3.2 GHz or 9 GHz depending on option



MODEL

**Agilent / Keysight
E8663D**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E8663D

LISTING

<https://aumictechlabs.com/products/e8663d-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight E8663D PSG RF Analog Signal Generator delivers signal generation across 100 kHz to 9 GHz, engineered for radar, satellite communications, and complex RF/microwave testing. This instrument combines low phase noise, high output power, and advanced modulation in a platform built for demanding measurement environments and backward compatibility with legacy PSG installations.

Technical Specifications

Frequency Performance Range: 100 kHz to 9 GHz (configurable to 3.2 GHz with Option 503) Resolution: 0.001 Hz (CW); 0.01 Hz (sweep modes) Switching Speed: <7 ms typical; 19 ms typical (Option 509, cross-band); 30–40 ms nominal (Option HY2) Frequency Settling: <9 ms typical (standard and Option UNX); <24 ms typical (Option UNY) Output Power Range: –135 dBm to +24 dBm typical (Option 1EU) Maximum Levelled Power: +15 dBm (standard); +21 dBm (Option 1EU) Output Impedance: 50 Ω nominal Leveling: Automatic Level Control (ALC) Phase Noise SSB Phase Noise: –143 dBc/Hz typical at 1 GHz, 10 kHz offset (Option UNY) Optimized at 5 dBm $\pm$ 2 dB output level Ultra-low options: UNX, UNY, HY2

Modulation & Waveform Generation Analog: AM, FM, Phase Modulation (ϕ M), and Pulse (simultaneously enabled) Pulse: 150 ns minimum width (standard); 20 ns minimum (Option UNW); 6 ns typical rise/fall time Internal Dual Function Generators: sine, dual-sine, swept-sine, triangle, ramp (positive/negative), square, uniform noise, Gaussian noise, dc Sweep Modes: step, list, and ramp (Option 007)

Key Features Frequency resolution to 0.001 Hz enables precise CW and sweep operation Dual internal function generators support complex modulation scenarios Multiple phase noise options allow optimization for low-noise applications Configurable pulse width from 20 ns to 150 ns accommodates radar and pulsed RF testing ALC maintains output power stability across the frequency range

Typical Applications Radar system design and characterization Satellite communications testing RF and microwave component validation Modulation performance measurement Phase noise-sensitive receiver testing

Compatibility & Integration The E8663D maintains backward compatibility with previous PSG models, supporting seamless integration into existing test systems and legacy configurations.

E8663D Characteristics / Specifications

PARAMETER	VALUE
Model	E8663D
Frequency Range Minimum	100 kHz
Frequency Maximum Options Class	3.2 GHz or 9 GHz depending on option
Frequency Resolution Class	millihertz class PSG resolution
Instrument Type	PSG RF analog signal generator
Series Family	Keysight PSG E8663D
Phase Noise Architecture	PSG low phase noise architecture
Output Power Class	high power PSG leveled output class
Level Accuracy Class	PSG absolute level accuracy tables
Modulation Types	AM FM pulse
Pulse Modulation	yes
Reference Oscillator	high stability PSG reference class
External Reference Input	yes
RF Output Connector Class	TypeNfemale class
Remote Interfaces	LAN GPIB class
Form Factor	benchtop instrument
Operating Temperature Class	standard laboratory class
Calibration Interval Class	annual or per OEM cycle class
Power Mains Class	100 to 240 VAC class
Firmware Upgrade Path	option and firmware upgradeable class
Brand Lineage	Agilent / Keysight
Sibling Family	E8257D E8267D PSG generators
Operating temperature	Class: standard laboratory class

E8663D Specifications

PARAMETER	VALUE
Agilent / Keysight E8663D PSG RF Analog Signal Generator	Overview
Applications	Low phase noise LO substitution, radar/EW stimulus, and high-purity CW/analog modulated RF generation.
PSG analog signal generator platform	Frequency options to 3.2 GHz or 9 GHz class
Technical Specifications	Model: E8663D

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: standard laboratory class
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Operating Temperature Class	standard laboratory class
Calibration Interval Class	annual or per OEM cycle class
Power Mains Class	100 to 240 VAC class
Firmware Upgrade Path	option and firmware upgradeable class
Brand Lineage	Agilent / Keysight
Sibling Family	E8257D E8267D PSG generators Notes From Agilent/Keysight E8663D PSG RF Analog Signal Generator product documentation. Confirm installed frequency option for exact stop frequency and power tables.

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 RF analog signal generator. OEM PSG documentation lists frequency coverage from 100 kHz to 3.2 GHz or 9 GHz depending on option, with excellent phase noise and high output power for demanding LO and radar/EW stimulus applications.

Applications

Low phase noise LO substitution, radar/EW stimulus, and high-purity CW/analog modulated RF generation.

Key Features

PSG analog signal generator platform

Frequency options to 3.2 GHz or 9 GHz class

High spectral purity PSG architecture

Analog AM FM pulse modulation

LAN GPIB remote control

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	E8663D
Frequency Range Minimum	100 kHz
Frequency Maximum Options Class	3.2 GHz or 9 GHz depending on option
Frequency Resolution Class	millihertz class PSG resolution
Instrument Type	PSG RF analog signal generator
Series Family	Keysight PSG E8663D
Phase Noise Architecture	PSG low phase noise architecture
Output Power Class	high power PSG leveled output class
Level Accuracy Class	PSG absolute level accuracy tables
Modulation Types	AM FM pulse
Pulse Modulation	yes
Reference Oscillator	high stability PSG reference class
External Reference Input	yes
RF Output Connector Class	TypeNfemale class
Remote Interfaces	LAN GPIB class
Form Factor	benchtop instrument
Operating Temperature Class	standard laboratory class
Calibration Interval Class	annual or per OEM cycle class
Power Mains Class	100 to 240 VAC class
Firmware Upgrade Path	option and firmware upgradeable class

PARAMETER	VALUE
Brand Lineage	Agilent / Keysight
Sibling Family	E8257D E8267D PSG generators

Notes

From Agilent/Keysight E8663D PSG RF Analog Signal Generator product documentation. Confirm installed frequency option for exact stop frequency and power tables.

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