

KEYSIGHT TECHNOLOGIES (AGILENT HP)

E4437B

The Keysight (Agilent/HP) E4437B is a 4 GHz digital RF signal generator from the ESG-DP series. It is designed to offer high spectral purity and versatile analog and digital modulation capabilities. It features an optional dual arbitrary waveform generator or real-time I/Q baseband generator, supporting custom digital modulation and standard communication protocols for R&D and manufacturing applications.

SPECIFICATIONS

Frequency

Minimum Frequency	250 kHz Hz
Maximum Frequency	4 GHz Hz
Frequency Resolution	0.01 Hz

Output

Output Power Range	-136 dBm to +13 dBm (typical, frequency dependent)
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Modulation

Modulation	AM, FM, Phase, Pulse, I/Q, FSK, MSK, PSK, QAM
Sweep Modes	Step, List (Frequency and Power)
AM Depth	0 to 100%

General

Reference Oscillator	10 MHz (Internal)
Interfaces	GPIO, RS-232

Physical

Dimensions (W×H×D)	426 x 133 x 432 mm
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Frequency Specifications

Frequency Range	250 kHz to 4 GHz
Internal Reference Frequency	10 MHz

Amplitude Specifications

Output Impedance	50 Ω
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Front Panel & Interfaces

RF Output Connector	Type-N (female)
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Spectral Purity

Harmonics	<-30 dBc (output ≤ +4 dBm)
Non-harmonics (Spurious)	<-65 dBc (250 kHz to 1 GHz, offset >250 Hz)

Performance

Amplitude Accuracy	±0.5 dB (250 kHz to 1 GHz, level >-127 dBm)
RF Output VSWR	< 1.5:1 (typical, < -2 dBm)

Environmental

Operating Temperature	0 °C to 55 °C
Storage Temperature	-40 °C to 71 °C

Power

Power Consumption	200 W (maximum)
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Inputs & Outputs

External Reference Input Frequencies	1, 2, 5, 10 MHz
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Physical & Environmental

Rack Height	3U
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TECHNOLOGY

RF / Microwave

APPLICATIONS

Research and development, manufacturing, and communications 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.