RF Explorer Signal Generator RFE6GEN - Specification

The RF Explorer Signal Generator baseline model RFE6GEN is a powerful, wideband fully programmable RF signal generator. It is the perfect companion for Spectrum Analyzer RF Explorer product line.

As a standalone unit, RFE6GEN can generate CW and Sweep signals by selecting embedded menu options. When connected to a PC, it can be fully programmed with the RF Explorer for Windows software tool. Furthermore, the unit can work as a powerful Tracking Generator when used with RF Explorer Spectrum Analyzer connected to the same PC, offering full Scalar Network Analyzer (SNA) capabilities. The SNA feature allows full characterization of filters, amplifiers and any 2-port RF device.

For advanced harmonic filtering, higher output power accuracy and additional capabilities please consider the RF Explorer Signal Generator Combo model. Full specifications of this model in this link. An expansion board is available to easily upgrade baseline Signal Generator RFE6GEN into a Combo model.

For full specifications please use Specifications and Datasheet document.

 A summary of main performance parameters are listed in the table below.

Parameter	Value
Frequency range	23.4MHz to 6GHz
Frequency step/resolution	1Khz
Frequency stability	±0.5ppm
Frequency accuracy (internal reference)	±1ppm
Output power range	40dBm to -30dBm in 3dB steps -10dBm to 0dBm in 3dB steps
Output power resolution	3dB
Output power accuracy	Typical ±3dB
Output power stability	Typical ±0.5dB

Parameter	Value
Output amplitude settling time	500uS
Output protection	25VDC
Harmonics	Typical -10dBc
Spurious	Typical less than -50dBc
Phase Noise	Typical less than -125dBc/Hz on 1MHz at 1GHz
Frequency Sweep settling	< 5ms
Amplitude Sweep settling	< 500uS
Sweep hops range	unlimited
Functional modes	CW Frequency Sweep Amplitude Sweep Tracking SNA
Operating temperature	0-45C

Parameter	Value
Connector type	SMA 50 ohms
Display	Graphics LCD 128x64 pixels
Backlight	5 levels
Weight	185g
Size	113x70x25 mm
Programmable	USB generic API Python API .NET API
Software	Windows PC
Certification	CE/FCC/RoHS/MSDS