

## FEATURES

- Has a frequency range of 34.5mhz - 4400mhz
- Output power range of 30dbm - 0dbm
- Continuous wave signal without any modulation
- The built-in electronic attenuator of the rational modes
- Downloadable software available for smartphones and tablets with android 4.0 from google play store
- 50Ω impedance

## RS PRO ISG LF44 Function Generator USB 2.0

RS Stock No.: 123-3580



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

From RS PRO, comes a high quality and great value signal generator. This pocket-sized generator is USB 2.0 interface compatible which can be used with either tablets or smartphones. Packed with an array of features, this signal generator is an excellent solution to generating electronic signals

## General Specifications

<b>Model Number</b>	ISG LF44
<b>Waveform Types</b>	Repeating or non-repeating waveforms
<b>Display Type</b>	640 x 480 RGB colour LCD
<b>Frequency Range (Square, Pulse and Arbitrary Waveform)</b>	34.5MHz to 4400MHz
<b>Time Base Accuracy</b>	within $\pm 50\text{kHz}$ (frequency span : 0.3GHz ~ 2.6GHz, 20 $\pm 5^\circ\text{C}$ )
<b>Input Impedance</b>	50M $\Omega$
<b>Output Impedance</b>	50 $\Omega$
<b>FM Modulation</b>	Yes
<b>Amplitude Modulation</b>	Yes
<b>Mode Control</b>	Fixed Frequency / Single Sweep / CW Sweep / Hopping / Power Sweep
<b>Interface Type</b>	USB 2.0
<b>USB Connector Type</b>	Mini B
<b>Supported OS</b>	Windows/Linux/Mac/Android
<b>Includes</b>	USB cable, CD ROM with ISG software, User manual, Primary RF software
<b>Applications</b>	Education, Training, Fourier theory investigation, Motherboard circuit measurement, Scalar network analyser, Remote controller maintenance

### Frequency Characteristics

Range	Resolution	Accuracy
34.5 MHz to 4.4 GHz	10kHz	$\pm 100$ Hz at 100MHz

### Phase Noise

Carrier Frequency	$f_c = 1.0$ GHz
At 10kHz Offset Frequency	at 10kHz Offset Frequency
At 100kHz Offset Frequency	$< -107$ dBc/Hz, typical $-110$ dBc/Hz

### Sine Wave Characteristics

2ND HARMONICS (0 dB Attenuation)	$\leq \leq -15$ dBc, typical 34.5MHz~2.0 GHz; $-10$ dBc, typical 2.0GHz~3.0 GHz; $-25$ dBc, typical 3.0GHz~4.4GHz
3rd HARMONICS (0 dB Attenuation)	$\leq \leq -5$ dBc, typical 34.5 MHz~2 GHz; $-20$ dBc, typical 2.0 GHz~3.0 GHz; $-40$ dBc, typical 3.0 GHz~4.4 GHz

### Frequency Specifications

Range	34.5MHz to 4.4GHz
Internal Reference Frequency	25 MHz, aging $\pm 1$ ppm at first year
Accuracy (0dBm Output Level)	$\pm 100$ Hz at 100MHz
Output Flatness (0dBm Output Level)	$-1$ dBm to $3.5$ dBm, typical
Frequency Offset	$-50$ kHz to $50$ kHz in $10$ kHz steps
Frequency Resolution	10kHz
Output Isolation	$\leq -75$ dBc , Output Control On/Off
Step Dwell	$\leq 1000$ ms in $1$ ms steps

### Electrical Specifications

<b>Supply Voltage</b>	5V Nominal
<b>Current Consumption</b>	200mA
<b>RF Connector Type</b>	N-type Male
<b>Impedance</b>	50Ohm Nominal
<b>Output VSWR</b>	<1.5 : 1 , Output Level @ -30dBm
<b>Maximum Permissible Dc Voltage</b>	±25V
<b>Maximum Reverse Power</b>	+30dBm (1W)
<b>Spurious Related To Resolution Settings</b>	≅ ≅ ≅ -30 dBc, typical, Resolution < 1MHz ; -65 dBc, typical, Resolution 1MHz
<b>Spurious Related To The Fundamental Output</b>	≅ -60 dBc, typical

### Mechanical Specifications

<b>Dimensions</b>	29.5 (Dia.) x 102.4mm
<b>Width</b>	30mm
<b>Diameter</b>	29.5mm
<b>Height</b>	102.4mm
<b>Weight</b>	100g

### Operation Environment Specifications

<b>Operating Temperature Range</b>	5°C to 45°C
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### Approvals

<b>Compliance/Certifications</b>	CE
<b>Electromagnetic Compatibility</b>	EN 55011 class A, EN 61326-1 (industrial environment), EN 61326-2-1, EN 61000-4-2, EN61000-4-3, EN 61000-4-11



ORDERING INFORMATION		FREE DOWNLOAD	
<b>ISA-730</b>	3GHz Spectrum Analyzer	<b>PC Software</b>	Primary RF, Remote Control Software, ISG Java program
<b>ISG-LF44</b>	RF Signal Generator		
ACCESSORIES			
ISA-730 : Quick Start Manual x1, CD-ROM with User Manual x1, Power Cord x1			
ISG-LF44 : USB cable x1, CD-ROM with ISG software, Primary RF Software and User Manual x1			

Specifications subject to change without notice.