

## GR-405 4,4 GHz RF signal generator

- ✓ **Pocket sized.**
- ✓ **PC controlled with cross-platform software.**

The new signal generator **GR-405** comes with the required features of a great generator in a pocket-sized equipment.

The RF signal generator meets users' requirements and has a USB interface with a frequency range from 35 MHz to 4400 MHz



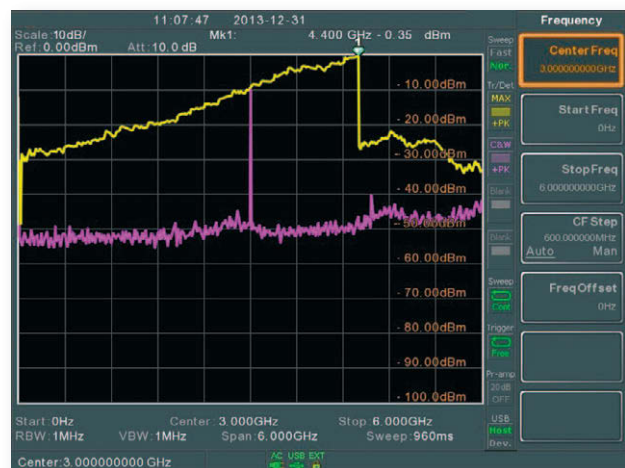
- ✓ **Frequency margin: from 34.5 MHz to 4.4 GHz.**
- ✓ **Continuous wave, signal without modulation.**
- ✓ **Frequency resolution: 10 kHz.**
- ✓ **Supports fixed frequency, frequency sweep, frequency hopping and power sweep modes.**
- ✓ **Output power: -30 dBm ~ 0 dBm.**
- ✓ **107 dBc/Hz phase noise @ Offset 100kHz.**
- ✓ **Powered and controlled via USB from PC.**

The signal generator provides continuous wave (CW) signal outputs without any signal modulation function. The built-in electronic attenuator allows an adjustable power range from -30 dBm to 0 dBm. The **GR-405** has several operational modes including fixed frequency, frequency sweep, frequency hopping, and power sweep.

The USB-Series RF signal generator, with the frequency bandwidth limitation, provides lower harmonic output performance.

Figure shows the test result of the tracking generator simultaneous power sweep and frequency sweep. The test result covers the frequency range from 35 MHz to 4400 MHz and the power range from -30 dBm to 0 dBm.

The yellow trace illustrates the test result of maximum hold and the pink trace shows the test result of signal output.



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SPECIFICATIONS	GR-405 RF signal generator
<b>Frequency margin</b> Output power Accuracy Resolution Output power Output Isolation	From 34.5 MHz to 4.4 GHz From -30 dBm to 0 dBm, 1 dB steps $\pm 100$ Hz at 100 MHz, 0 dBm output 10 kHz On / Off $\leq -75$ dBc Output Control On/Off
<b>Mode Control</b> Frequency offset Amplitude Absolute Accuracy Output Flatness Phase noise $< -97$ dBc/Hz $< -107$ dBc/Hz	Fixed Frequency, Single Sweep, CW Sweep, Hopping and Power sweep modes From -50 kHz to 50 kHz, 10 kHz steps 0 dBm $\pm 1$ dB typical at 2200 MHz, Salida 0 dBm $\pm 3.5$ dB, ref. at 2200 MHz, 0 dBm output  10 kHz offset @ 1,0 GHz, typical -100 dBc/Hz 100 kHz offset @ 1,0 GHz, typical -110dBc/Hz
<b>2nd harmonics</b> $\leq -15$ dBc, typical $\leq -10$ dBc, typical $\leq -25$ dBc, typical	0 dB attenuation 34.5 MHz to 2.0 GHz 2.0 GHz to 3.0 GHz 3.0 GHz to 4.4 GHz
<b>3rd harmonics</b> $\leq -5$ dBc, typical $\leq -20$ dBc, typical $\leq -40$ dBc, typical	0 dB attenuation 34.5 MHz to 2,0 GHz 2.0 GHz to 3,0 GHz 3.0 GHz to 4,4 GHz
<b>PC software</b> Java control panel Interface USB connector type	Windows 2000 / XP / Vista / 7 / 8 / Linux / OS X USB 2.0 Mini-B
<b>Power supply</b> Supply voltage	5 V nominal
<b>RF connector</b> Type Impedance	N-male 50 $\Omega$ nominal
<b>VSWR output</b> $< 1.5:1$ Maximum permissible DC voltage Maximum Reverse Power	Output level @ -30 dBm $\pm 25$ V <sub>DC</sub> +30 dBm
<b>Mechanical features</b> Dimensions Weight	W. 102 mm x H. 29 mm 91 g