

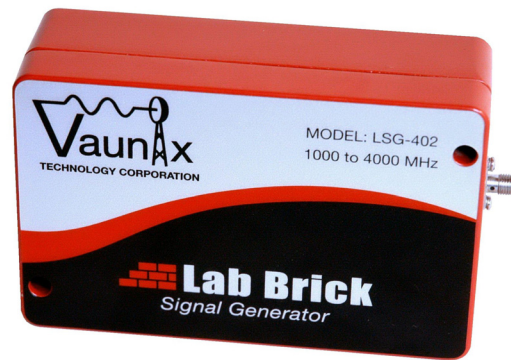
# Lab Brick<sup>®</sup> Signal Generator

## **General Description**

Lab Brick Signal Generators are RF signal sources with operation up to 6 GHz. These units require connection to a USB port for control and power. No additional DC supply voltage is required. Lab Brick Signal Generators are easily programmable for fixed frequency or frequency stepping directly from the included GUI. Lab Brick Signal Generator API dll and LabVIEW compatible drivers are also available for custom programming applications.

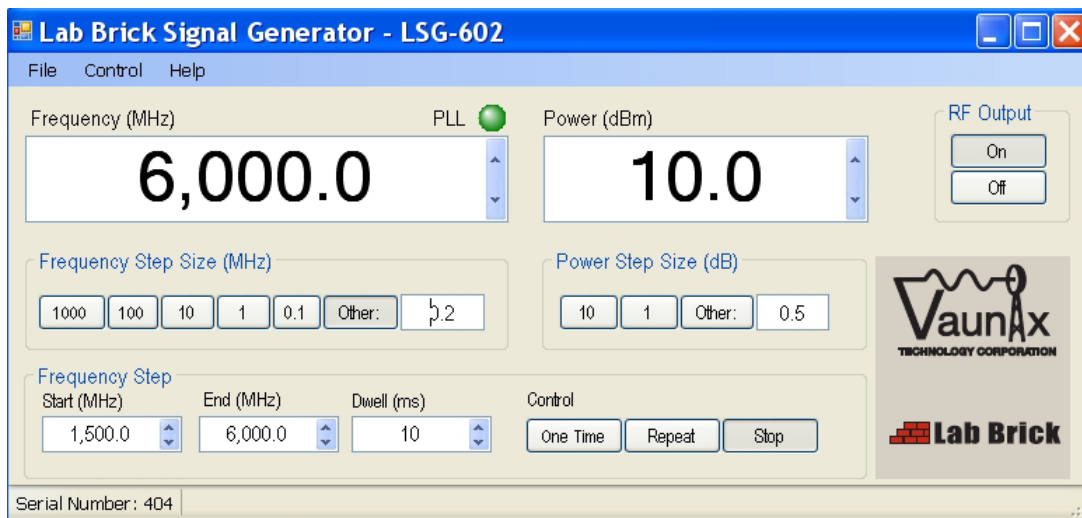
## **Features/Benefits**

- > USB powered and controlled
- > Includes easy to install and use GUI
- > Programmable frequency stepping
- > Operate multiple devices directly from a PC or self powered USB hub
- > Autonomous operation from USB hub or battery pack
- > Easily programmable for ATE applications
- > Robust aluminum construction



## **Applications**

- > Automated Test Equipment (ATE)
- > Portable LO Source
- > Engineering/Production Test Lab



## Product Specification

## LSG Series

### Standard Models<sup>1</sup>

LSG-251	50 - 250 MHz
LSG-152	250 - 1500 MHz
LSG-222	500 - 2200 MHz
LSG-402	1000 - 4000 MHz
LSG-602	1500 - 6000 MHz

### Standard Operating Modes

Fixed Frequency

Frequency Stepping - Single Sweep

Frequency Stepping - Repeat Sweep

### Available Options

Opt 001	External Reference
Opt 002	+13 dBm Output Power

### Electrical Specifications<sup>2</sup>

#### Frequency

Resolution	100 kHz
Accuracy	+/- 2ppm

#### Output Power

Range	+10 to -45 dBm <sup>3</sup>
Resolution	0.5 dB
Accuracy	+/-0.5 dB at +10 dBm +1.5/-0.5 dB full range

#### Spurious

Typical	-80 dBc
Maximum	-70 dBc

#### VSWR

Maximum	1.5:1
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#### Harmonics

Maximum	-10 dBc
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#### Phase Noise @ 10kHz/100kHz Offset

LSG-251	-105/-125 dBc/Hz
LSG-152	-95/-115 dBc/Hz
LSG-222	-90/-110 dBc/Hz
LSG-402	-85/-105 dBc/Hz
LSG-602	-75/-95 dBc/Hz

#### DC Current

Via USB	400mA typical
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### Mechanical Specifications

#### RF Connector

SMA-Female

#### USB Connector

MiniB-Female

#### Dimensions

4.90x3.14x1.59 inches  
(124x80x40 mm)

#### Weight

< 1.0 lbs.  
( < .45 kG)

#### Mounting Holes (2)

#6 Socket Head Screws - not  
included

### GUI Compatibility

Windows 2000/XP/Vista

### Included Accessories

USB Flash Drive with:

GUI Software

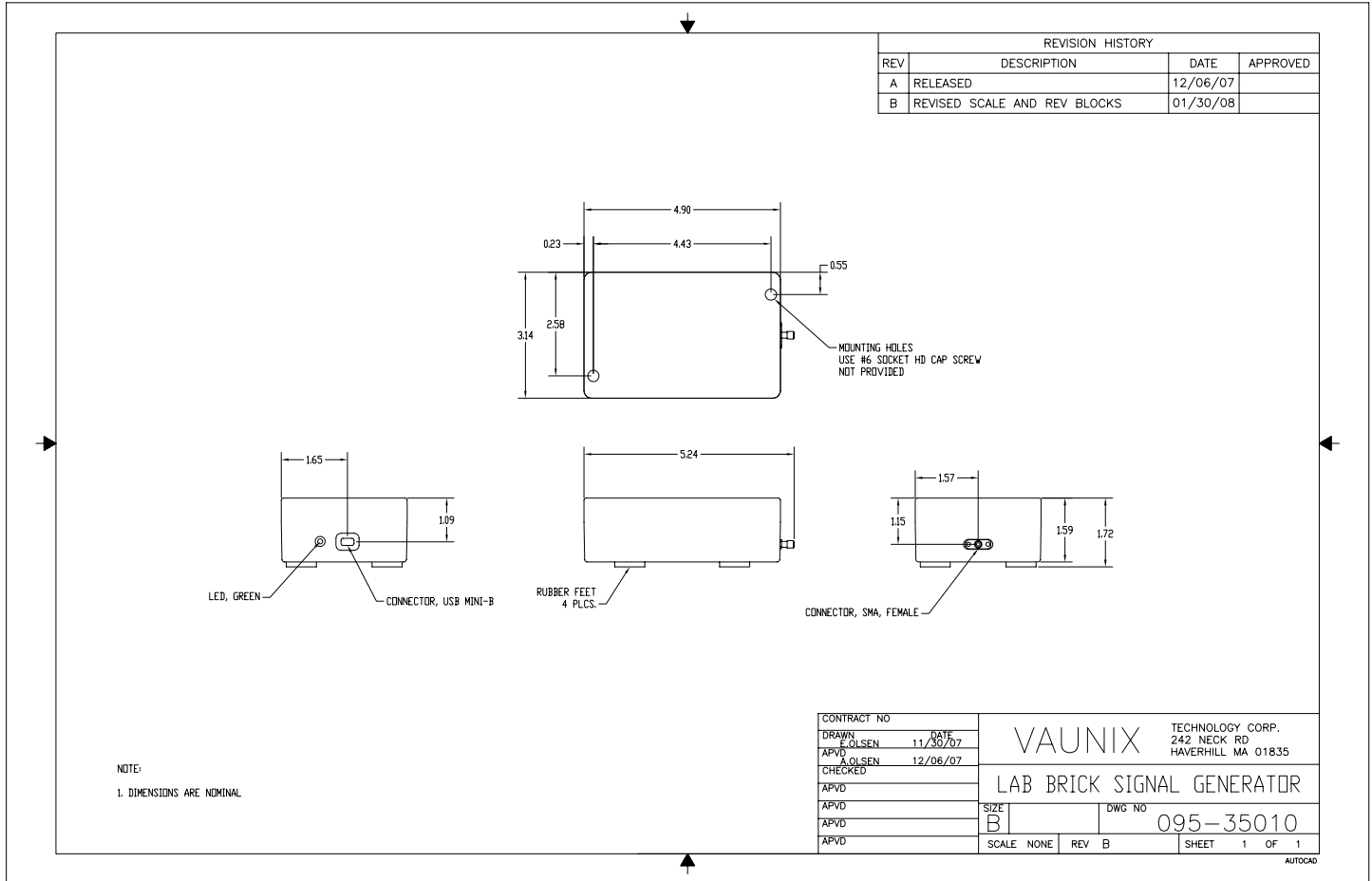
User Manual/Programming Guide

6' USB Cable

#### Notes

1. Customized models are available tailored to specific performance requirements.
2. Specifications are subject to change without notice.
3. +10 to -40 dBm for the LSG-602.

**Mechanical Outline**



**Ordering Information**

For price, delivery and order placement please contact Vaunix Technology Corporation:  
242 Neck Road Haverhill, MA 01835 Phone: 978-662-7839 Fax: 978-662-7842  
or visit [www.labbrick.com](http://www.labbrick.com) to order online