

## Key Features

- 24 to 6000MHz Coverage
- Extended Coverage to 12000MHz with Doubler
- >7 dBm Output
- USB PC Interface
- Industry Standard SCPI Commands
- 255 Settable frequencies via rear panel

# SG6000

## SIGNAL GENERATOR



### SG6000, A wideband RF Signal Generator

The SG6000 enables users to generate a high quality sine-wave in a compact package. The output covers 7 octaves from 24 to 6000MHz or to 12000MHz with the optional doubler output. The produced sine-wave wave is fully synthesized using modern fractional N synthesis. The step size of the non doubled RF output varies from a maximum of ~1.5KHz to less than 20Hz , depending on band of operation. The synthesized source can accept an external 10MHz reference OR it can use its own internal 10MHz. Output power is typically above +7dBm and can be turned ON/OFF via USB commands.

### Ease of Use

The SG6000 is controlled using its USB port and a host PC. The user connects the PC to SG6000 and with provide software frequency output can be controlled as well RF ON/OFF function.

### Signal Generator Operation

With the SG6000 connected to the PC via uSB port, industry standard SCPI commands are used to control frequency and RF output ON/OFF. The USB port is configured on the host PC as a COM port. This configuration allows users to control the SG6000 for automated test applications.

In addition to PC control of output frequency a dual set of rear panel rotary switches allow the user to change output frequency without a host PC . Using the host PC, the user first programs the table of 255 custom frequencies into the SG6000 NVRAM. Later these frequencies can be recalled by changing the rotary switches *without* a host PC. This is particularly useful for field applications of the SG6000



# SG6000

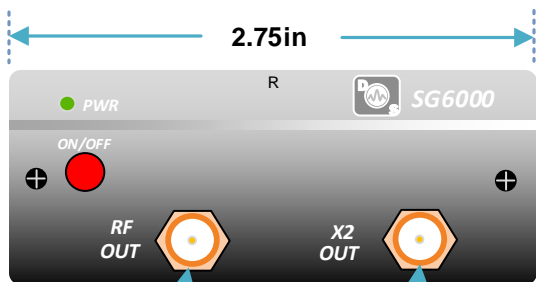
## SPECIFICATIONS

Parameter	Min	Max	Typ	Units
Output Frequency Range ( w/ Opt. 1 Doubler)	24	6000 (12000)		MHz
Output Power	+6	+11	+8	dBm
x2 Output Power (Opt. 1)	+6	+9	+7	dB
Output Flatness	-3	+3	+/-2	dB
Output Flatness (Opt. 1)			+/-2	dB
Phase Noise @ 5GHz, 10KHz Offset (-6dB for each sub-octave, +6dB for x2 Opt. 1)			-82	dBc
Output VSWR		1.5:1	1.3:1	VSWR
Output Power @ Min Setting			-20	dBm
Step Size (decreases by 2 as RF band reduces)	<25	<1500		Hz
10MHz Reference Input power Range (Opt. 2)	-20	+15		dBm
DC Power Input thru USB Port	4.75	5.2		vdc

## SG6000 Front and Rear Panel Features

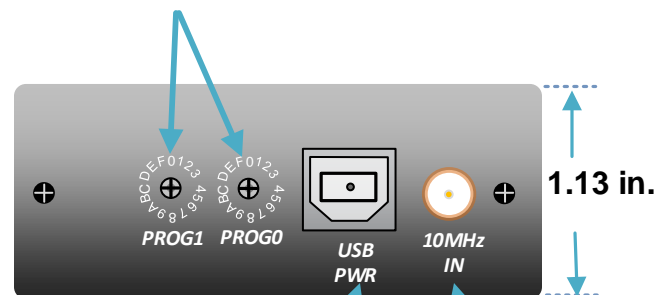
**CASE DIMENSIONS:**  
1.13(H)x2.75(W)x6.0(L) in.

Two rotary 16 position switches  
allows up to 255 SG Frequencies



SG doubled output Signal  
(SMA), to 12000 MHz @  
+7dBm (typ), Opt.1

SG output Signal (SMA), 24 to  
6000 MHz, +8dBm (typ)



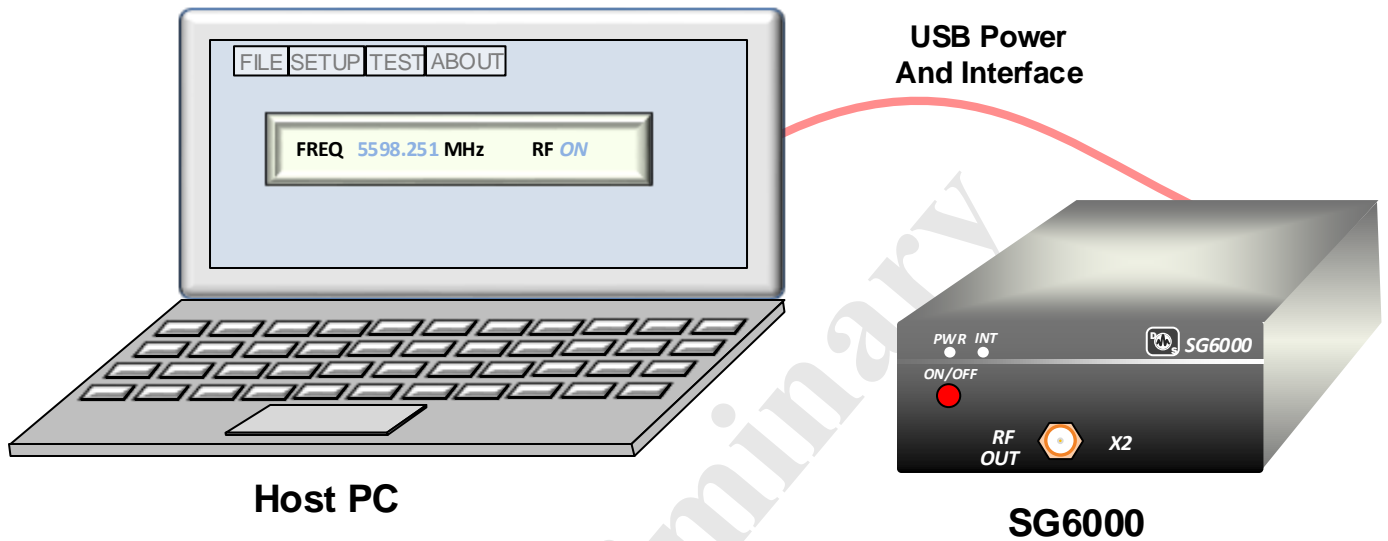
Opt.2, External  
10MHz reference  
IN (SMA)

USB Interface to PC  
and DC Power Input

# SG6000

## Typical User connections

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## Ordering Information

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Model SG6000, 24 to 6000MHz	\$495.00
Option 1, Doubler Output (to 12000MHz)	+ \$600.00
Option 2, External 10MHz input ( Removes Int. 10MHz)	+ \$65.00