

Product Brief

9 kHz to 3000 MHz Signal Generator **APGEN3000**

The APGEN 3000 is a versatile, ultra-compact general-purpose RF signal generator, with 0.1 Hz frequency resolution, good signal quality, and powerful trigger features.

It offers a wide leveled output power range from -65 to +10 dBm and a variety of sweeping and modulation capabilities ideally suited for EMC measurements. The APGEN3000 extends AnaPico's signal generator family with an attractive solution for very cost-sensitive applications.

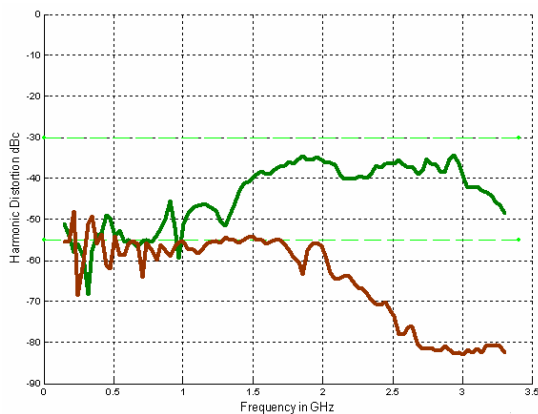


Key Features

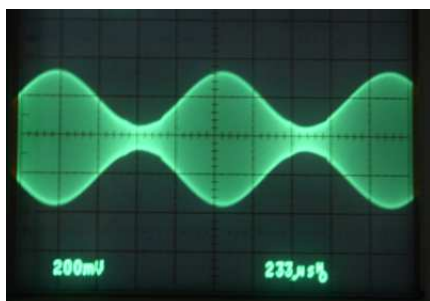
- Very compact and rugged enclosure
- 0.1 Hz to 20 kHz rate AM and fast pulse modulator
- LAN + USB + GPIB (optional) with SCPI instruction set
- PC-based virtual panel software utilities and drivers
- Powerful trigger and sweep modes

Applications

- EMC testing
- General purpose RF source
- Automated test systems (ATE)



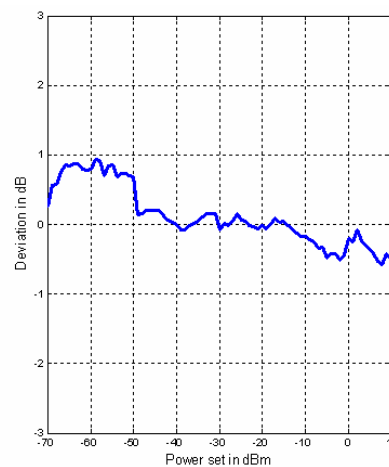
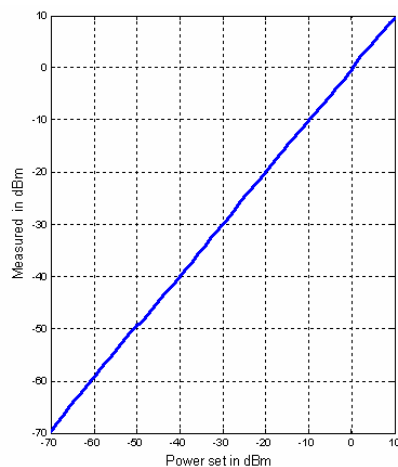
Second (green) and third (brown) harmonics at +10 dBm output power



Amplitude Modulation (80%, 1 kHz)

Key Specifications

Parameter	Value	Notes
Frequency range	9 kHz -- 3000 MHz	
resolution	0.1 Hz	
Settling time	5 ms	
SSB Phase noise		
at 20 kHz from carrier	-102 dBc/Hz	1 GHz carrier
wideband noise	-150 dBc/Hz	
Power level		
Range	-65 -- +10 dBm	
Resolution	0.1 dB	
Level uncertainty	< 1 dB	
Output impedance VSWR	50 Ω < 1.8	
Spectral purity		
output harmonics	< -30 dBc	at +7 dBm, $f > 1$ MHz
non-harmonic spurious	< -55 dBc	
Amplitude Modulation		
Rate	0.1 Hz – 20 kHz	Sine, pulse, triangle
Depth	0 to 90 %	
Distortion	2 % at 30 % 3 % at 80 %	$f_{mod} = 1$ kHz
Pulse Modulation		
Rate	DC – 10 MHz	
On/OFF Ratio	60 dB	
Pulse width	> 100 ns	
Rise/Fall times	< 10 ns	
Internal reference frequency	100 MHz	
Temperature stability	± 5 ppm	0 to 50 $^{\circ}\text{C}$



Level Linearity at 2.4 GHz