

# 3GHz low phase noise CW signal generator

Model Name : **SG010M3R0GB**

**RoHS Compliant**  
Directive 2011/65/EU



< Features >

- Output frequency : 10MHz to 3GHz (1Hz step)
- Low phase noise : Typ. -95dBc/Hz@10kHz, 3GHz carrier
- Compact and lightweight : 224 x 320.5 x 99mm approx. 3.5kg
- Low power consumption : 40VA or below

< Application >

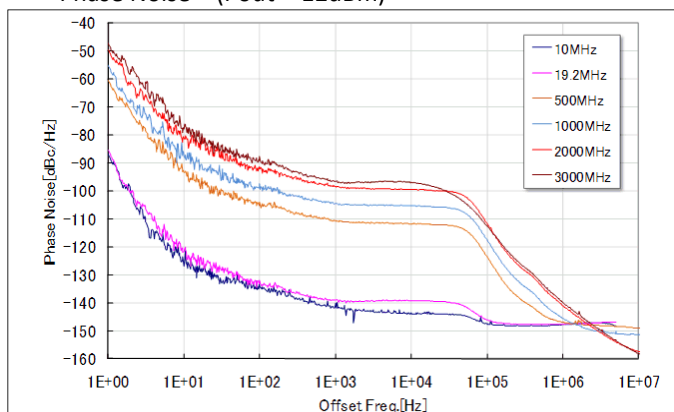
**1) As research and development equipment**

Capable of multilevel modulation for data communication with enhanced speed; also manages the evaluation of analog circuits for multi-carrier transmission equipment

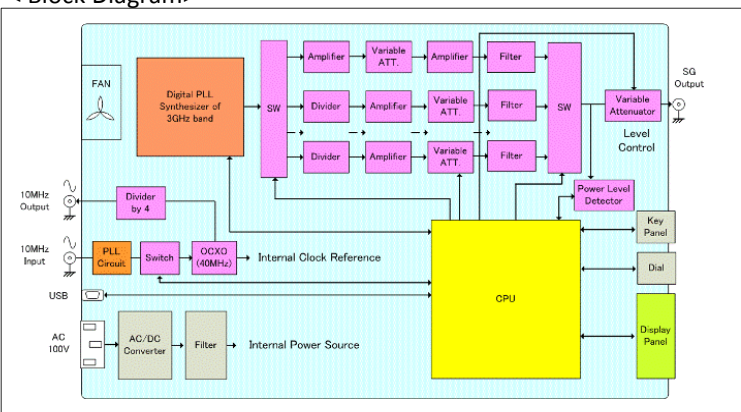
**2) As inspection equipment for communication device production lines**

For generation of sampling clock signals for A/D converters as well as D/A converters in high speed/high precision digital communications

< Phase Noise > (Pout=+12dBm)



< Block Diagram >



< Specifications >

Items	Specifications	
Output frequency range	10MHz to 3000MHz	
Frequency step	1Hz	
Output power	-20dBm to +12dBm ( Precision of output power : within ±1.0dB )	
Output power step	0.1dB	
Frequency setting time	0.1 sec or below	
Frequency stability	Temperature characteristics : within 20ppb / 0°C to +40°C (based on the frequency at +25°C) Aging stability within ± 0.1ppm/year (Based on the frequency 30days after power activation)	
Phase noise at 10kHz offset (typ. )	10MHz to 20MHz	-137dBc / Hz
	20MHz to 50MHz	-125dBc / Hz
	50MHz to 180MHz	-119dBc / Hz
	180MHz to 375MHz	-113dBc / Hz
	375MHz to 750MHz	-107dBc / Hz
	750MHz to 1.5GHz	-101dBc / Hz
	1.5GHz to 3GHz	-95dBc / Hz
Spurious	Harmonic : 10MHz to 20MHz	-15dBc or below
	Harmonic : 20MHz to 3GHz	-30dBc or below
	Non-harmonic	-60dBc or below
Power consumption	40VA or below	
Operational temperature range	0 to +40 °C (Relative humidity : 95%or below)	
External dimensions	224(W) x 320.5(D) x 99(H)mm (Except the terminal and projection)	
Weight	3.5kg or below	

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