RF Signal Generator

OSG25000 Series

- 250 kHz to 3 GHz /4 GHz frequency range with resolution 0.1 Hz.
- Phase Noise: ≤-115 dBc/Hz and ≤-105 dBc/Hz.
- -127 ~ +13 dBm and -115 ~ +17 dBm amplitude output range with 0.01 dB resolution.
- AM / FM, phase and pulse modulation.
- Standard LAN, USB and GPIB interface.

Model		OSG25313	OSG25412	OSG25417	OSG25411
Frequency Features	Frequency Range	250 kHz ~ 3 GHz	250 kHz ~ 4 GHz	250 kHz ~ 4 GHz	250 kHz ~ 4 GHz
	Resolution	0. 1 Hz			
	Internal Time Base	Frequency: 10 MHz; aging rate≤±1 ppm/year; output amplitude ≥0.35 Vrms			
	Accuracy	≤±0.1 ppm			<+1 ppm
	External Reference Input	Frequency: 10 MHz; output amplitude: 0.5 ~ 2 Vrms; connect: BNC female, 50 Ω			
Output Features	Amplitude Range	-127 ~ +13 dBm		-115～+17 dBm	-110 ~ +13 dBm
	Resolution	0.01 dB			
	Accuracy	≤±1 dB (≥-120 dBm); ≤±1.8 dB (≥-127 dBm)			≤±1 dB
	SSB Phase Noise	≤-115 dBc/Hz			≤-105 dBc/Hz
	Residual FM	≤ 10 Hz peak			≤ 30 Hz peak
	Harmonics	≤-30 dBc			
	Non-Harmonics	≤-50 dBc			
	Output Interface	Standing wave ratio ≤ 1.8; impedance: 50 Ω (nominal value; N-type female)			
Modulation Features	AM Modulation	Modulation frequency: 20 Hz ~ 20 kHz; amplitude modulation 0 ~ 100%			
		Amplitude error ≤ ± (set value × 5% + 0.2%); amplitude modulation distortion <2%			
	FM Modulation	Modulation frequency: 20 Hz ~ 80 kHz; frequency offset range of 20 Hz ~ 100 kHz			
		Frequency deviation error: ≤ ± (set value × 5% + 0.2%) FM distortion <1%			
	PM Modulation	Modulation frequency: 0.3 ~ 20 kHz; Phase deviation: 0 ~ 10rad (<10 kHz) 0 ~ 5 rad (≤20 kHz)			
		Phase error: ±(set value × 5% + 0.2rad); phase distortion 1.5%			
	Pulse Modulation	Rise / fall time: ≤ 60 ns; on / off ratio ≥60 dB			
		Pulse period: 1us ~ 2 s; pulse width 400 ns ~ 1 s			
External Modulation Characteristics (Specified Input Level, 1 Vp-p)	3 dB Input Bandwidth	AM / FM ： 20 Hz～20 kHz; PM: 300 Hz～20 kHz			
	Pulse Input	Level: ≥ 1.5 VPP; cycle 10us ~ 1 s			
Rear Panel Input and Output Characteristics	Trigger Input	Waveform: sine wave, square wave; input level ≥ 2.5 VPP			
	Trigger Output	Wave: Pulse wave			
	Scan Output	Waveform: sawtooth wave; output level: 1 ~ 3.5 V			
	Pulse Output	Waveform: the same as the modulation pulse; output level: low level ≤ 0.8 V, high level ≥ 2.4 V			
Low Frequency Function Source Characteristics	Frequency and Waveform Type	20 Hz ~ 100 kHz (sine wave, triangular wave, sawtooth wave)			
		20 Hz ~ 20 kHz (square wave)； 50 ms～20us (pulse wave)			
	Output Characteristics	Output amplitude: 0 ~ 3 VP-P; amplitude error: ≤ 5%; harmonic distortion: ≤ 70 dBc			
General Features	Interface	Standard LAN, USB and GPIB interface			
	Monitor	7.0 inch TFT, 800 x 480 pixels			
	Power	Voltage ： 100 V～240 V (50/60 Hz);			
		Frequency: (47.5 ~ 52.5)Hz; power consumption≤ 50 W			
	Size / Weight	Size: 426 mm × 133 mm × 450 mm (W x H x D); weight ： ≤10 kg			
	Working Temperature Range	0 ℃～+40 ℃	-10 ℃～+50 ℃	0 ℃ ~ +40 ℃	
	Storage Temperature Range	-40 ℃ ~ +70 ℃			