

## SG2100 SERIES



**SG2125**

### Features

- .DDS technology and FPGA chip design, ultra-low power consumption
- .Sine wave in main output frequency: 1  $\mu$  Hz~25MHz
- .Square, pulse and another wave in main output frequency: 1  $\mu$  Hz~1MHz
- .Sine wave, square wave, triangle wave in sub wave signal output frequency: 10mHz~200kHz
- .Accurate weak signal output with automatic precise attenuation circuit
- .High frequency resolution: 10mHz
- .With the functions of linear and log sweep, FSK, PSK, ASK, AM and FM modulations
- .With frequency-measuring, cycle-measuring, pulse width measuring and counting functions

Technical Data		SG2105/SG2110/SG2115/SG2120/SG2125	
Main output	Output frequency	1 $\mu$ Hz ~ 5MHz(SG2105) 1 $\mu$ Hz ~ 15MHz(SG2115) 1 $\mu$ Hz ~ 25MHz(SG2125)	1 $\mu$ Hz ~ 10MHz(SG2110) 1 $\mu$ Hz ~ 20MHz(SG2120)
	Impedance	50 $\Omega$ $\pm$ 10%	
	Output amplitude	10mVp-p~20Vp-p	
	Output wave form	Sine, square, pulse, triangle, ramp, TTL and arbitrary	
	Output modulation	Single frequency, sweep frequency, AM, FM, PM, FSK, ASK, PSK	
	Wave length	6~4096 points	
	Wave accuracy	10 bits	
	Sampling rate	150MSa/s	
	Frequency accuracy	$\leq \pm 5 \times 10^{-6}$	
	Frequency resolution	1 $\mu$ Hz	
	Amplitude accuracy	$\leq \pm (1\% + 2mV)$ (1kHz, 20Vp-p)	
	Amplitude flatness	$\pm 3\%$ (SG2105, SG2110, SG2115) $\pm 5\%$ (SG2120, Sg2125)	
	Amplitude resolution	10mV	
	Offset range	-5V~+5V	
	Offset resolution	10mV	
	AM modulation depth	0% ~ 120% (0~200kHz int., 1Hz~100kHz ext.)	
	FM modulation deviation	100% (0~200kHz int., 1Hz~100kHz ext.)	
	PM modulation range	0 ~ 360.0° (0~200kHz int., 1Hz~100kHz ext.)	
	Phase resolution	1°	
	Sub output	Output frequency	0~200kHz
Impedance		50 $\Omega$ $\pm$ 10%	
Output amplitude		100mVp-p~20Vp-p	
Output waveform		Sine, square, triangle	
Frequency resolution		10mHz	
Frequency accuracy		$\leq \pm 5 \times 10^{-6}$	
Amplitude resolution		100mV	
Sine wave	Amplitude accuracy	$\pm (1\% + 2mV)$ (1kHz, 20Vp-p)	
	Distortion factor	$\leq 0.3\%$ (20Hz~20kHz)	
Square wave	Rise time	$\leq 20ns$	
	SYMM.	1% ~ 99.9%	
Sweep frequency	Sweep frequency range	1 $\mu$ Hz ~ 5MHz(SG2105) 1 $\mu$ Hz ~ 15MHz (SG2115) 1 $\mu$ Hz ~ 25MHz (SG2125)	1 $\mu$ Hz ~ 10MHz(SG2110) 1 $\mu$ Hz ~ 20MHz (SG2120)
	Sweep time	10ms~50s	
Arbitrary	Frequency range	1 $\mu$ Hz ~ 1MHz	
	Wave length	6 ~ 1024 points	
	Accuracy	10 bits	
Counter	Frequency range	1Hz ~ 100MHz	
	Counting capacity	10bits	
	Input voltage range	100mV~20V	
Time base	Frequency	50MHz	
	Stability	$\pm 1 \times 10^{-6}$ /d	
Power supply	110 ~ 127VAC $\pm$ 10% / 220 ~ 240VAC $\pm$ 10%, 50Hz $\pm$ 2Hz / 60Hz $\pm$ 2Hz		
Dimensions(W $\times$ H $\times$ D)	255 $\times$ 100 $\times$ 370mm		
Weight	2.5 kg		