

DDS FUNCTION GENERATOR

SG2100 SERIES



POWER SUPPLY

TEST INSTRUMENT

EDU. INSTRUMENT

METER

MACHINE

ACCESSORY



SG2120

Features

.DDS technology and FPGA chip design, ultra-low power consumption

- Sine wave in main output frequency: 1 μ Hz~40MHz
- Square, pulse and another wave in main output frequency: 1 μ Hz~1MHz
- Sine wave, squarewave, triangle wave in sub wave signal output frequency: 10MHz~200kHz
- Accurate weak signal output with automatic precise attenuation circuit
- High frequency resolution: 1 μ Hz
- With the functions of linear analog sweep, FSK, PSK, ASK, AM and FM modulations
- Optional power output function

Technical Data			SG2110/SG2120/SG2130/SG2140
	Output frequency	1 μ Hz ~ 10MHz (SG2110) 1 μ Hz ~ 20MHz (SG2120)	1 μ Hz ~ 30MHz (SG2130) 1 μ Hz ~ 40MHz (SG2140)
	Impedance	50 Ω ±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	
Main output	Frequency accuracy	≤ ±5 × 10 ⁻⁶	
	Frequency resolution	1 μ Hz	
	Amplitude accuracy	≤ ±(1%+2mV) (1kHz, 20Vp-p)	
	Amplitude flatness	±3% (SG2110) ±5% (SG2120, SG2130, SG2140)	
	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°	
	Output frequency	10mHz~200kHz	
	Impedance	600 Ω ±10%	
	Output amplitude	100mVp-p~20Vp-p	
Sub output	Output waveform	Sine, square, triangle	
	Frequency resolution	10mHz	
	Frequency accuracy	≤ ±5 × 10 ⁻⁶	
	Amplitude resolution	100mV	
	Amplitude accuracy	±(1%+2mV) (1kHz, 20Vp-p)	
Sine wave	Distortion factor	≤0.5% (20Hz~20kHz)	
Square wave	Rise time	≤20ns	
	SYMM.	1% ~ 99%	
Sweep frequency	Sweep frequency range	10mHz ~ 10MHz (SG2110) 10mHz ~ 20MHz (SG2120)	10mHz ~ 30MHz (SG2130) 10mHz ~ 40MHz (SG2140)
	Sweep time	10ms~50s	
	Frequency range	1 μ Hz ~ 1MHz	
Arbitrary	Wave length	6 ~ 1024 points	
	Accuracy	10 bits	
Counter	Frequency range	1Hz ~ 60MHz	
	Counting capacity	10bits	
	Input voltage range	100mV~20V	
Power output (Optional)	Output power	10W (4 Ω load)	
	Frequency range	0Hz~40kHz (sine waveform)	
Power supply		110 ~ 127VAC ±10%/220 ~ 240VAC ±10%, 50Hz ±2Hz/60Hz ±2Hz	
Dimensions(W × H × D)		255 × 100 × 370mm	
Weight		2.5 kg	