

# DDS FUNCTION(ARBITRARY) GENERATOR

SPF05/10/20/40/80/120 **CE**

## Features

- .Using Direct Digital Synthesis(DDS) technology
- .0.2mV Output Amplitude for Small Signal
- .100  $\mu$  Hz~120MHz frequency range for main waveforms
- .100MHz equal-accuracy frequency counter
- .Store/recall 10 wavespanel setting
- .Arbitrary setting of start and stop for frequency sweep output
- .More than 30 kinds of output waveform(arbitrary is optional)
- .13-charracter highly visible VFD
- .RS232 interface, GP-IB interface option



**SPF40**

Technical Data		SPF05 / 10 / 20 / 40/80 / 120
Main output	Output frequency	100 $\mu$ Hz ~ 5MHz(SPF05) 100 $\mu$ Hz~10MHz (SPF10) 100 $\mu$ Hz ~ 20MHz(SPF20) 100 $\mu$ Hz~40MHz (SPF40) 100 $\mu$ Hz ~ 80MHz(SPF80) 100 $\mu$ Hz ~ 120MHz(SPF120) Sine: 100 $\mu$ Hz~5/10/20/40/80/120MHz Square and TTL: 100uHz~5/10/20/40MHz Other and stored waveform:100 $\mu$ Hz~100kHz
	Output amplitude	1mVp - p~10Vp-p (50 $\Omega$ load) (f $\leq$ 40MHz) 100 $\mu$ Vp-p ~ 3Vp-p (50 $\Omega$ load) (f > 40MHz) 2mVp - p~20Vp-p (1M $\Omega$ load) (f $\leq$ 40MHz) 200 $\mu$ Vp-p ~ 6Vp-p (1M $\Omega$ load) (f > 40MHz)
	Output wave	sine, square,pulse, triangle, ramp, ladder and etc. more than 30 waveforms
	Output modulation	single frequency, sweep frequency, AM, FM, FSK, PSK
	Wave length	8~16000 points
	Wave accuracy	12bits
	Sampling rate	300Msa/s
	Frequency resolution	1 $\mu$ Hz
	Frequency accuracy	$\leq \pm 0.0005\%$
	Amplitude resolution	1 $\mu$ Vp-p
	Amplitude accuracy	$\leq \pm 1\%+0.2mV$
	Amplitude flatness	$\pm 3\%$
	Offset range	$\pm 10V$
	Offset resolution	1 $\mu$ V
	Offset error	$< \pm (1\%+10mV)$
	AM modulation depth	1% ~ 120%
	FM modulation deviation	Max.50%
	PM modulation range	0.1 ~ 360.0°
	Phase resolution	0.1°
	Sine wave	Harmonic distortion
Distortion factor		$\leq 0.1\%$
Square wave	Rise time	$\leq 15ns$
	SYMM.	0.1% ~ 99.9% adjustable
40MHz ~ 120MHz	Output amplitude	13dBm
	Amplitude flatness	$\pm 1dB$
	Attenuation	0 ~ -76dB
	Resolution	-0.1dB
Arbitrary wave module (Option)	Frequency range	100 $\mu$ Hz ~ 100kHz
	Wave length	8 ~ 16000 points
	Resolution	10 bits
Counter	Frequency range	1Hz ~ 100MHz
	Counting capacity	$\leq 4.29 \times 10^9$
Time base	Frequency	10MHz
	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	

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