

DDS FUNCTION (ARBITRARY) GENERATOR

UPF25/UPF60/UPF120



Features

- .Two same function outputs
- .Using Direct Digital Synthesis(DDS) technology
- .1 μ Hz~120MHz frequency range for main waveforms
- .200MHz equal-accuracy frequency counter
- .Arbitrary setting of start and stop for frequency sweep output
- .More than 50 kinds of output waveform(arbitrary is optional)
- .4.3" TFT colour display
- .Standard USB(H), USB(D)and LAN interface (UPF60/UPF120 only)



UPF60

Technical Data		UPF25	UPF60	UPF120	
CH1,CH2	Output frequency	Square:	1 μ Hz ~ 25MHz	1 μ Hz ~ 60MHz	1 μ Hz ~ 120MHz
		Ramp:	1 μ Hz~5MHz	1 μ Hz~60MHz	1 μ Hz~80MHz
		Pulse:	1 μ Hz~400kHz	1 μ Hz~3MHz	1 μ Hz~5MHz
		Arbitrary:	500 μ Hz~5MHz	1 μ Hz~20MHz	1 μ Hz~30MHz
		Arbitrary:	1 μ Hz~5MHz	1 μ Hz~15MHz	1 μ Hz~25MHz
	Output amplitude		\leq 10MHz: 1mVpp~10Vpp; (50 Ω , UPF25)		\leq 20MHz: 1mVpp~10Vpp; (50 Ω)
			\leq 25MHz: 1mVpp~5Vpp; (50 Ω , UPF25)		\leq 60MHz: 1mVpp~5Vpp; (50 Ω)
				\leq 120MHz: 1mVpp~2Vpp; (50 Ω)	
	Output wave	Sine, Square, Ramp, Burst, Noise, DC, Arbitrary Harmonic, Expression (UPF60/120)			
	Output modulation	AM, FM, PM, ASK, FSK, PWM, PSK BPSK, QPSK, OSK, SUM, DSB-AM, QAM (UPF60/120)			
	Wave length	2pts~8kpts		8pts~16Mpts	
	Wave accuracy	14bits		16bits(Symbol included)	
	Sampling rate	125MSa/s		1.28GSa/s (320MSa/s, 4 times interpolation)	
	Frequency resolution	1 μ Hz			
	Frequency stability	\pm 50ppm (90 days); \pm 100ppm (1 year)			
	Amplitude resolution	1 μ Vp-p			
	Amplitude accuracy	\leq 1%+2mVp-p			
	Amplitude flatness	\pm 0.1dB (<200kHz); \pm 0.2dB (200kHz~60MHz)			
	Offset range	\pm 10V (High Resistance)/ \pm 5V (50 Ω load)			
	Offset resolution	\pm (1%+5mV)			
	AM modulation depth	0% ~ 120%			
	FM modulation deviation	Max.50%			
PM modulation range	0~ 360.0°				
FSK/ASK	2mHz~100kHz (50% duty cycle square)				
PWM	2mHz~50kHz				
Sine wave	Harmonic distortion	DC~100kHz -60dBc		DC~1MHz -60dBc	
		100kHz ~1MHz -50dBc		1MHz ~10MHz -55dBc	
1MHz~25MHz -35dBc		10MHz ~40MHz -50dBc			
	THD	<0.2%(DC~20kHz,1Vpp)			
Square wave	Rise time	<24ns		<4ns	
	Duty Ratio	0~100.00%		0.001%~99.999%	
Sweep	Sweep time	1ms~500s			
	Sweep mode	line/log			
Burst	Alternation	1 μ s~500s			
	Burst count	1~50000 cycle			
	Burst mode	single, internal, external			
Pulse	Wave width	20ns~2000s			
	Over shoot	<2%			
Counter(UPF25 only)	Frequency range	100mHz ~ 200MHz			
	Frequency resolution	6 digits/s			
Interface	USB (H), USB (D), LAN (UPF60/UPF120 only)				
Power supply	100~240 V AC, 45~440Hz, CAT II, 50VA				
Dimensions(W \times H \times D)	305 \times 93 \times 230mm				
Weight	4.2 kg				