

DDS FUNCTION (ARBITRARY) GENERATOR

UPF25/UPF60/UPF80/UPF120

Features

- Two same function outputs
- Using Direct Digital Synthesis(DDS) technology
- 1 μ Hz~120MHz frequency range for main waveforms
- 100MHz 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 optional LAN interface



UPF60

Technical Data			UPF25	UPF60	UPF80	UPF120	
CH1,CH2	Output frequency	Square:	1 μ Hz ~ 25MHz	1 μ Hz ~ 60MHz	1 μ Hz ~ 80MHz	1 μ Hz ~ 120MHz	
		Ramp:	1 μ Hz~5MHz	1 μ Hz~60MHz	1 μ Hz~70MHz	1 μ Hz~80MHz	
		Pulse:	1 μ Hz~400kHz	1 μ Hz~3MHz	1 μ Hz~4MHz	1 μ Hz~5MHz	
		Arbitrary:	500 μ Hz~5MHz	1 μ Hz~20MHz	1 μ Hz~25MHz	1 μ Hz~30MHz	
	Output amplitude		1 μ Hz~5MHz	1 μ Hz~15MHz	1 μ Hz~20MHz	1 μ Hz~25MHz	
			≤10MHz: 1mVpp~10Vpp; (50 Ω , UPF25) ≤25MHz: 1mVpp~5Vpp; (50 Ω , UPF25)		≤20MHz: 1mVpp~10Vpp; (50 Ω) ≤60MHz: 1mVpp~5Vpp; (50 Ω) ≤120MHz: 1mVpp~2Vpp; (50 Ω)		
	Output wave	Sine, Square, Ramp, Burst, Noise, DC, Arbitrary Harmonic, Expression (UPF60/80/120)					
	Output modulation	AM, FM, PM, ASK, FSK, PWM, PSK BPSK, QPSK, OSK, SUM, DSB-AM, QAM (UPF60/80/120)					
	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	±50ppm (90 days); ±100ppm (1 year)					
	Amplitude resolution	1 μ Vp-p					
	Amplitude accuracy	≤1%+2mVp-p					
	Amplitude flatness	±0.1dB (<200kHz); ±0.2dB (200kHz~60MHz)					
	Offset range	±10V (High Resistance)/±5V (50 Ω load)					
	Offset resolution	±(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 100kHz ~1MHz -50dBc 1MHz~25MHz -35dBc			DC~1MHz -60dBc 1MHz ~10MHz -55dBc 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 (optional only for UPF60/80/120)						
Power supply	100~240 V AC, 45~440Hz, CAT II, 50VA						
Dimensions(W × H × D)	305 × 93 × 230mm						
Weight	4.2 kg						