

HF SIGNAL GENERATOR

HG2461 SERIES



Features

- .Signal frequency up to 600MHz
- .DDS Technology provides for a superior signal with low distortion and high stability
- .Both RF output and function output
- .3.5" QVGA color LCD and soft keys
- .Produced by SMT, smart metal case
- .1 μHz frequency resolution
- .RS 232 interface and USB, GPIB optional
- .Versatile modulation
AM, FM, PM, FSK, PSK, Sweep, Burst
- .Variety of waveforms
Sine, square, pulse, triangle, ramp



HG2461 I

Technical Data		HG2461 I/II/III/IV/V/VI	
RF output (output A)		100 μHz~80MHz	HG2461 I
Frequency range		100 μHz~110MHz	HG2461 II
		100 μHz~150MHz	HG2461 III
		100 μHz~200MHz	HG2461 IV
		100 μHz~300MHz	HG2461 V
		100 μHz~600MHz	HG2461 VI
	Frequency resolution	1 μHz	≤80MHz
		1Hz	>80MHz
Frequency stability		≤5×10 ⁻⁶	
RF output level		-127dBm~+13dBm	
RF output resolution		0.1dB	
Attenuator accuracy		±2dB	
Output impedance		50 Ω, VSWR<1.5	
Spectral purity	Harmonic	<-30dBc	(output level≤+4dBm)
	Non harmonic	<-40dBc	(output level≤+4dBm, deviation>5kHz)
	Sub harmonic	<-40dBc	(output level≤+4dBm)
	Residual FM	<100Hz	
AM Modulation	Frequency	int. 100mHz~10kHz ext. 20Hz~10kHz	
	Depth	0~120% (fc≤80MHz, level≤+4dBm) 0~80% (fc>80MHz, level≤+4dBm)	
	Resolution	0.1%	
	Frequency	int. 100 μHz~10kHz (fc≤80MHz) int. 100 μHz~1kHz (fc>80MHz)	
FM Modulation	Deviation	fc/2 (fc≤80MHz) 1 μHz~100kHz (fc>80MHz)	
	Resolution	100Hz	
	Carrier frequency	≥9kHz	
Pulse Modulation (option)	Frequency	ext. DC~10MHz (TTL level)	
	Rise and fall	<15nS	
	On/Off	>65dB	
FSK Modulation	F1, F2 range	100 μHz~80MHz 80.000001MHz~120MHz 120.000001MHz~200MHz 200.000001MHz~300MHz	(FSK rate<10kHz) (FSK rate<2kHz) (FSK rate<2kHz) (FSK rate<2kHz)
	Control mode	internal and external (TTL level, low-F1, high-F2)	

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PSK Modulation	Carrier frequency	<80MHz
	P1, P2 range	0~360°
	Resolution	0.1°
	Alternation	0.1ms~800s
Burst Modulation	Control mode	internal and external (TTL level, high-P2, low-P1)
	Carrier frequency	<80MHz
	Burst count	1~10000 cycle ($\leq 800 \times f_c$)
	Alternation	0.1ms~800s internal
Sweep	Control mode	single external (TTL level)
	Sweep rate	1ms~800s (lin., $f_c \leq 80\text{MHz}$) 100ms~800s (log., $f_c \leq 80\text{MHz}$)
	Stepping time	10ms~800s ($f_c > 80\text{MHz}$) 100 μHz~80MHz
	Frequency range	80.000001MHz~120MHz 120.000001MHz~200MHz 200.000001MHz~300MHz
MOD Signal output	Sweep mode	lin. and log. ($f_c \leq 80\text{MHz}$) Stepping ($f_c > 80\text{MHz}$)
	Frequency	100mHz~10kHz
	Waveform	sine
	Amplitude	5Vp-p ± 2%
Function output (output B)		620 Ω
MOD Signal output	Frequency range	100 μHz~2MHz
	Resolution	100 μHz
	Accuracy	±5 × 10⁻⁶
	Amplitude (sine)	100mVp-p~6Vp-p (high impedance) 50mVp-p~3Vp-p (50 Ω)
MOD Signal output	Resolution	±0.1mVp-p
	Accuracy	≤5% ± 5mVp-p ($f \leq 100\text{kHz}$)
	Distortion	1% (2Vp-p, 1kHz)
	Impedance	50 Ω
Waveform		Sine, square, triangle, ramp, pulse (rise and fall time ≤ 500nS)
A/B sine phase range		0.0~360.0°
Power supply		110~127 VAC ± 10%, 220~240VAC ± 10% 50Hz ± 2Hz, 60Hz ± 2Hz
Dimensions(W×H×D)		255×170×370mm
Weight		4kg