

DDS 雙輸出數位信號產生器

HFG-205D

- 最大頻率輸出 5MHz
- 單色 LCD 顯示/雙通道輸出
- 採用先進 DDS 技術
- 採樣率 100Msa/s，垂直解析度 8 位，波形記憶長度 1024Points
- 可輸出 32 種內建波形
- 40 組面板設定存儲及呼叫
- 最小輸出 1mV (50Ω) 穩定波形
- FM，FSK，ASK，PSK 多種調製功能
- 頻率掃描、觸發、TTL 輸出
- 多重保護功能:過電壓、過電流、短路保護、反灌電壓保護功能
- 內建頻率計 200MHz



Specifications

MODE		HFG-205D
Frequency range		1uHz~5MHz
Waveform (Output A)		
Type	32 built-in waveforms, including Sine, Square, Triangle, Ramp, Pulse, etc.	
Length	1024 points	
Vertical resolution	8 bits	
Sampling rate	100MSa/s	
Harmonic distortion of sine	≥40dBc (<1NHz); ≥35dBc (1MHz~20MHz)	
Total distortion of sine	≤1% (20Hz~200kHz)	
Rise/fall time of square	≤35ns	
Overshoot of square	≤10%	
Duty cycle of square	1%~99%	
Frequency (CHA)		
Range	Sine	1uHz~5MHz
	Squre	1uHz~5MHz
	Other	1uHz~1MHz
Resolution	1μHz	
Accuracy	±5×10 ⁻⁵	
Stability	±5×10 ⁻⁶ /3hours	
Amplitude (Output A)		
Range	2mVpp~20Vpp, 1uHz~10MHz (high impedance)	
Resolution	20mVpp (amplitude>2Vpp), 2mVpp (amplitude<2Vpp)	
Accuracy	± (1% +2 mVrms) (high impedance, RMS, frequency 1kHz)	
Stability	±0.5% / 3 hours	
Flatness	±5% (frequency±10% (frequency> 10MHz)	
Output impedance	50Ω	



DC Offset (CHA)	
Range	±10V (high impedance, attenuation 0 dB)
Resolution	20mVdc
Accuracy	±(1% + 20mVdc)
Sweep (CHA)	
Parameter	Frequency,Amplitude
Range	Free to set starting point and end point
Time	100ms~900s
Direction	Up,Down,Up-Down
Mode	Linear, Logarithmic
Control	Auto sweep or manual sweep
Frequency Modulation (FM) (CHA)	
Carrier signal	CHA Signal
Modulating signal	CHB or external signal
FM deviation	0%~20%
Burst(CHA)	
Carrier signal	CHA Signal
Trigger signal	TTL_A Signal
Burst counts	1~65000 cycles
Trigger mode	Interna TTL, External, Signle
Shift keying(CHA)	
FSK	Free to set the hop frequency and carrier frequency
ASK	Free to set the hop amplitude and thecarrier amplitude
PSK	Hop phase: 0~360°, resolution: 1°
Alternative rate	10ms~60s
Waveform(CHB)	
Type	32 built-in waveforms, including Sine, Square, Triangle, Ramp, Pulse, etc.
Length	1024 points
Vertical resolution	8 bits
Sampling rate	12.5Msa/s
Duty cycle of square	1%~99%
Frequency(CHB)	
Range	Sine:1uHz~1MHz;Other:1uHz~100KHz
Resolution	1uHz
Accuracy	± 1x10 ⁻⁵
Amplitude(CHB)	
Range	50mVpp~20Vpp (high impedance)
Resolution	20mVpp
Output impedance	50Ω



Burst(CHB)	
Carrier signal	CHB Single
Trigger signal	TTL_B Signal
Burst counts	1~65000 cycles
Trigger mode	Internal TTL, External, Single
TTL output	
Waveform	Square wave, rise/fall time $\leq 20\text{ns}$
Frequency	10mHz~1MHz
Amplitude	TTL, CMOS compatible, low4V
Frequency counter	
Testing frequency range	1Hz~200MHz
Input signal amplitude	100mVpp~20Vpp
Common characteristics	
Operation characteristics	Key operation for all functions, Menu display, Rotary dial adjustment
Display	Mono LCD
Language	English, Chinese (simplified), Chinese (traditional)
Power source	AC110V/220V $\pm 10\%$ selectable, 50/60Hz, Max. 45VA
Environmental condition	0~40°C, <80%RH
Standard accessories	Power cord $\times 1$, Operation manual $\times 1$, BNC-BNC cable $\times 1$, Test lead $\times 1$
Dimension	385 \times 260 \times 110mm
Weight	3.5kg