

DDS 數位任意波信號產生器

TFG-3600E 系列

- 最大頻率輸出 5MHz/10MHz/20MHz
- 3.5 吋彩色 TFT 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
- 具有任意波功能，可設置 8 組用戶自定義波型
- 可輸出 32 種內建波形和 8 組用戶自定義波形
- 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
- 標配:RS-232 介面，200MHz 內建頻率計



Specifications

MODE	TFG-3605E		TFG-3610E		TFG-3620E	
Frequency range	1uHz~5MHz		1uHz ~10MHz		1uHz ~20MHz	
Waveform (Output A)						
Types	32 built-in waveforms, including Sine, Square, Triangle,Ramp,Pulse,etc. And 8 user- defined arbitrary waveforms					
Length	1024 points					
Vertical resolution	8 bits					
Sampling rate	100MSa/s					
Harmonic distortion	≥40dBc(<1MHz); ≥35dBc (1~20MHz)					
Total distortion	≤1% (20Hz~200kHz)					
Rise/fall time of square	≤35ns, Overshoot: ≤10%					
Duty cycle of square	1%~99%					
Frequency (CHA)						
Range	Sine	1uHz~5MHz	1uHz~10MHz		1uHz~20MHz	
	Squre	1uHz~5MHz	Squre		1uHz~5MHz	
	Other	1uHz~1MHz	Other		1uHz~1MHz	
Resolution	1uHz					
Accuracy	± (50ppm + 40mHz)					
Amplitude (Output A)						
Range	2mVpp~20Vpp, 1uHz~10MHz (high impedance) 2mVpp~15Vpp, 10MHz~15MHz (high impedance) 2mVpp~8Vpp, 15MHz~20MHz (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. And 8 user- defined arbitrary waveforms
Length	1024 points
Vertical resolution	8 bits
Sampling rate	12.5Msa/s
Duty cycle of square	1%~99%
Frequency(CHB)	40mHz~1MHz; Other waveforms: 10mHz~100kHz
Range	Sine:1uHz~1MHz;Other:1uHz~100KHz
Resolution	1uHz
Accuracy	$\pm 1 \times 10^{-5}$
Amplitude(CHB)	
Range	50mVpp~20Vpp (high impedance)
Resolution	20mVpp
Output impedance	50Ω
Burst(CHB)	1~65000 cycles
Carrier signal	CHB Single
Trigger signal	TTL_B Signal
Burst counts	1~65000 cycles
Tigger mode	Interna TTL, External, Signle
TTL output	
Waveform	Square wave, rise/fall time $\leq 20\text{ns}$
Frequency	10mHz~1MHz
Amplitude	TTL , CMOS compatible, low<0.3V,high>4V
Frequency counter	
Testing frequency range	1Hz~200MHz
Input signal amplitude	100mVpp~20Vpp
Remote counter	RS-232 interface
General	
Operation characteristics	Key operation for all funcations,Menu display,Rotary dial adjustment
Display	TFT LCD
Language	English,Chinese(simplified),Chinese(traditional)
Power consumption	AC110V/220V $\pm 10\%$ selectable,50/60Hz,Max.45VA
Environmental: Temperature	0~40°C ,<80%RH
Standard accessories	Power cord×1,Operation manual×1,Software CD×1,RS-232 cable×1, BNC-BNC cable×1,Test lead×1
Dimension	385×260×110mm
Weight	3.5Kg