

# DDS Function Generator

## ARBITRARY WAVEFORM, 1 $\mu$ Hz~20MHz



### TFG3600E SERIES



### FEATURES

- Frequency range 1 $\mu$ Hz~5MHz/10MHz/15MHz/20MHz
- 2 output channels
- 3.5-inch TFT LCD display
- Direct Digital Synthesis technology (DDS)
- Min. output amplitude 1mV (50 $\Omega$ ) with good stability
- Sampling rate 100MSa/s, vertical resolution 8 bit, waveform length 1024 points
- Arbitrary waveform function
- 32 built-in waveforms and 8 user-defined arbitrary waveforms
- 40 sets save & recall for panel settings
- Modulations: FM, FSK, ASK, PSK
- Frequency sweep, amplitude sweep, burst and TTL output functions
- Over voltage, over current, short circuit and reverse voltage protections
- High speed rotary dial and keypad input
- Standard RS-232 interface for PC remote control
- Standard 200MHz external frequency counter
- Optional power amplifier

# DDS Function Generator

## ARBITRARY WAVEFORM, 1uHz~20MHz

### SPECIFICATIONS

Model	TFG-3605E	TFG-3610E	TFG-3615E	TFG-3620E	
<b>Waveform</b>					
Output waveform	32 built-in waveforms, including Sine, Square, Triangle, Ramp, Pulse, etc. 8 user-defined arbitrary waveforms				
Waveform length	1024 points				
Vertical resolution	8 bits				
Sampling rate	100MSa/s				
Sine	Harmonic distortion	≥40dBc (<1MHz); ≥35dBc (1~20MHz)			
	Total distortion	≤1% (20Hz~200kHz)			
Square	Rise/fall time	≤35ns			
	Duty cycle	1%~99%			
<b>Frequency</b>					
Range	Sine	1μHz~5MHz	1μHz~10MHz	1μHz~15MHz	1μHz~20MHz
	Square	1μHz~5MHz			
	Other	1μHz~1MHz			
Resolution	1μHz				
Accuracy	±5x10 <sup>-5</sup>				
<b>Output characteristics</b>					
Amplitude	Range	2mVpp~20Vpp (open circuit)			
	Resolution	20mVpp (amplitude>2V); 2mVpp (amplitude<2V)			
	Accuracy	±(1%+2mVrms) (open circuit, 1kHz, sine)			
	Flatness	±5% (<10MHz); ±10% (>10MHz)			
	Output impedance	50Ω			
Offset	Range	±10V (open circuit, attenuation 0 dB)			
	Resolution	20mVdc			
	Accuracy	±(1%+20mVdc)			
<b>Sweep</b>					
Time	100ms~900s				
Direction	Up, Down, Up-Down				
Mode	Linearity, Logarithmic				
Modulations	FM, FSK, ASK, PSK, Burst, 200MHz frequency counter, Power amplifier				
<b>CHB output characteristics</b>					
Output waveform	32 built-in waveforms, including Sine, Square, Triangle, Ramp, Pulse, etc. 8 user-defined arbitrary waveforms				
Waveform length	1024 points				
Vertical resolution	8 bits				
Sampling rate	12.5MSa/s				
Frequency range	Sine: 1μHz~1MHz; Other: 1μHz~100kHz				
Frequency resolution	1μHz				
Frequency accuracy	±1x10 <sup>-5</sup>				
Amplitude range	50mVpp~20Vpp (open circuit)				
Amplitude resolution	20mVpp				
Output impedance	50Ω				
<b>General</b>					
Interface	RS-232 interface				
Power source	AC110V/220V±10% selectable, 50/60Hz, Max. 45VA				
Accessories	Power cord x1, Operation manual x1, Software CD x1, RS-232 cable x1, BNC-BNC cable x1, Test lead x1				
Dimension (WxHxD)	260x110x385mm				
Weight	3.5kg				