

# DDS Function Generator

LOW-COST, 1uHz~20MHz



## TFG3200E SERIES



## FEATURES

- Frequency range 1 $\mu$ Hz~5MHz/10MHz/15MHz/20MHz
- 2 output channels
- Mono LCD display
- Min. output amplitude 1mV (50 $\Omega$ ) with good stability
- Sampling rate 100MSa/s, vertical resolution 8 bits, waveform length 1024 points
- 32 built-in 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 200MHz external frequency counter
- Optional RS-232 interface for PC remote control
- Optional power amplifier

# DDS Function Generator

LOW-COST, 1μHz~20MHz

## SPECIFICATIONS

Model	TFG-3205E		TFG-3210E		TFG-3215E		TFG-3220E	
Waveform								
Output waveform	32 built-in waveforms, including Sine, Square, Triangle, Ramp, Pulse, etc.							
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%						
Frequency								
Range	Sine	1μHz~5MHz		1μHz~10MHz		1μHz~15MHz		1μHz~20MHz
	Square	1μHz~5MHz						
	Other	1μHz~1MHz						
Resolution	1μHz							
Accuracy	±5x10 <sup>-5</sup>							
Output characteristics								
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)						
Sweep								
Time	100ms~900s							
Direction	Up, Down, Up-Down							
Mode	Linearity, Logarithmic							
Modulations	FM, FSK, ASK, PSK, Burst, 200MHz frequency counter, Power amplifier							
CHB output characteristics								
Output waveform	32 built-in waveforms, including Sine, Square, Triangle, Ramp, Pulse, etc.							
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							
General								
Interface	Optional RS-232 interface							
Power source	AC110V/220V±10% selectable, 50/60Hz, Max. 45VA							
Accessories	Power cord x1, Operation manual x1, BNC-BNC cable x1, Test lead x1 Software CD x1, RS-232 cable x1 (optional)							
Dimension (WxHxD)	260x110x385mm							
Weight	3.5kg							