

TFG2200 Series

Introduction

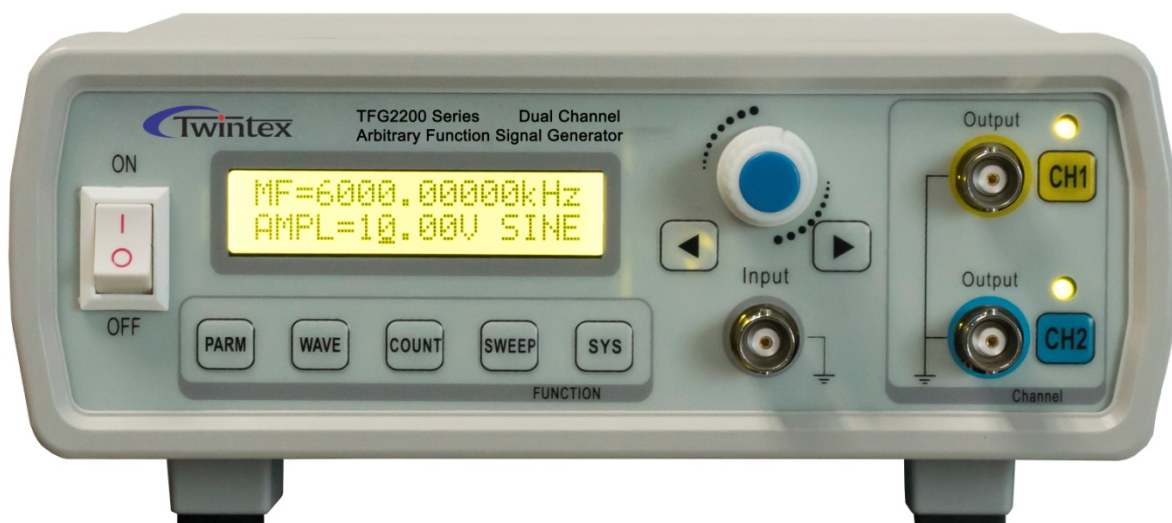
The TFG2200 series adopts large scale CMOS integrated circuit and high speed microprocessor. The internal circuit adopts active crystal oscillator as benchmark, giving good signal stability. Surface Mounting Technology improves interference immunity and operational life span.

The TFG2200 series has two channels for DDS signal output, including Sine, Square, Triangle, Sawtooth and user-defined waveforms. It provides amplitude, offset and phase control. Meanwhile, it has TTL electric level output, External frequency measurement, counter and sweep functions. It is an ideal instrument for basic electronic engineering, laboratories, production lines, teaching and scientific research.

Features

- ✓ Frequency range 0.01Hz~6MHz/12MHz/25MHz
- ✓ 2 independent output channels
- ✓ Sampling rate 250MSa/s, vertical resolution 12 bits, waveform length 2k points
- ✓ 17 built-in waveforms and 4 user-defined arbitrary waveforms
- ✓ 20 sets save & recall for operating parameters
- ✓ Adjustable duty cycle 0.1%~99.9%
- ✓ FSK and ASK modulations
- ✓ Linearity/Logarithmic sweep signal
- ✓ USB interface, free PC software ware
- ✓ 100MHz external frequency counter

Product photo



Specifications

Model	TFG-2206	TFG-2212	TFG-2225
Output Frequency			
Sine	0.01Hz ~ 6MHz	0.01Hz ~ 12MHz	0.01Hz ~ 25MHz
Square	0.01Hz ~ 6MHz	0.01Hz ~ 6MHz	0.01Hz ~ 6MHz
Triangle	0.01Hz ~ 6MHz	0.01Hz ~ 6MHz	0.01Hz ~ 6MHz
Arbitrary	0.01Hz ~ 6MHz	0.01Hz ~ 6MHz	0.01Hz ~ 6MHz
Resolution	0.01Hz		
Accuracy	$\leq \pm 5 \times 10^{-6}$		
Frequency Stability	$\pm 2 \times 10^{-6}$ /3 hour		
Waveform			
Output waveform	17 waveforms, including Sine, Square, Triangle, Sawtooth, Pulse, Noise, Arb		
Waveform length	2048 points		
Vertical resolution	12 bits		
Sampling rate	250MSa/s		
Sine wave distortion	$\leq 0.8\%$ (reference frequency 1kHz)		
Triangle linearity	$\geq 98\%$ (0.01Hz~10kHz)		
Rise or fall time of square wave	$\leq 30\text{ns}$		
Square wave duty cycle range	0.1%~99.9%		
Pulse wave width range	10nS~1S		
Output Characteristics			
Output amplitude	$\geq 20\text{Vp-p}$ (No load)		
Output impedance	$50\Omega \pm 10\%$		
DC offset	$\pm 10\text{V}$		
TTL output	Electric level range	$> 3.3\text{Vp-p}$	
	Fan-out	> 20 TTL (Load)	
	Level rise fall time	$\leq 20\text{ns}$	
Sweep	Sweep mode	Linear sweep, Logarithmic sweep	
	Frequency range	Free to set Starting and stop frequencies	
	Sweep range	fM1 (pre-set) ~ fM2 (pre-set)	
	Sweep speed	1s~999s /step-by-step	
Frequency counter	Counter range	0-4294967295	
	Frequency range	1Hz~100MHz	
	Input voltage range	2Vp-p~20Vp-p	
General Features			
Display	LCD1602 in English		
Power source	AC85~260V, 47~63Hz		
Operation environment	0~40°C, <80%RH		
Accessories	Power cord x1, Software CD x1, USB cable x1, Test lead x2		
Dimension	190Wx90Hx200D mm		
Weight	0.7kg		