

TFG6800 Series Function/Arbitrary Waveform Generator



* without option PA

Features

- 250MSa/s sample rate, 16bit vertical resolution and 16Mpts waveform length
- Rise/fall time of Square: $\leq 4.2\text{ns}$
- Removable PA (option)
- Optional IOT interface
- High precision frequency counter
- 7"touch screen display

Specification

		TFG6803	TFG6806	TFG6810
Frequency				
Sine/Square		1μHz~35MHz	1μHz~65MHz	1μHz~100MHz
Pulse		1μHz-25MHz		
Ramp		1μHz-3MHz		
PRBS		1kbps~60Mbps		
Noise (-3dB)		100MHz bandwidth		
Other		1μHz~20MHz		
Resolution		1μHz or 12 digits		
Accuracy		±(20ppm + 14pHz)		
Waveform				
Type		165 kinds include: Sine, Square, Ramp, Pulse, Noise, DC, PRBS, user-defined Arbitrary waveform, user-defined harmonic, etc		
Smample Rate		250MSa/s		
Vertical Resolution		16 bits		
Arbitrary	Sample Rate	1μSa/s~125MSa/s		
	Length	2-16Mpts		
	Resolution	16 bits		
Square	Rise/Fall Time	≤4.2ns		
	Duty Cycle	0.0001%~99.9999%		
Pulse	Rise/Fall Time	≥8ns		
	Width	13ns ~ (period - 13ns)		
DC Offset (High-Z)				
Range		±10Vpk(ac+dc)		
Resolution		1mVdc		
Accuracy		±(setting value ×1%+amplitude value×0.5%+2mV)		
Sweep				
Range		1μHz ~ upper frequency limit		
Type		Linear, logarithmic		
Time		1ms to 500s		
Burst				
Mode		Triggered, Gated		
Period		1μs to 600s		
Count		1 to 100000000 cycles		
Counter				
Frequency Range		1mHz to 350MHz (DC Couple) 10Hz to 350MHz (AC Couple)		
Resolution		8 digits/s		
Period and Pulse Width Measurement		100ns to 20s		
Duty Cycle Measurement		0.1% to 99.9%		
Amplitude (High-Z)				
Range		2mVpp~20Vpp, frequency≤10MHz 2mVpp~10Vpp, frequency>10MHz		
Resolution		1mVpp or 4digits		
Accuracy		±(of settings value×1%+1mV), Sine 1kHz, ≥10mVpp, offset 0V		
Modulation				
FM,AM,PM, PWM,Sum	Carrier Waveform	Sine, Square, Ramp (only pulse for PWM), etc.		
	Modulating Waveform	Sine, Square, Ramp, etc.		
	Modulating Frequency	1mHz to 100kHz		
FSK,4FSK,NFSK,	Carrier Waveform	Sine, Square, Ramp, ect		
PSK,4PSK,NPSK,	Hop Frequency	1μHz -upper limits		
ASK,OSK	Hop Rate	1mHz to 1MHz		
General Characteristic				
Power		AC 100~240V, 50/60Hz ±10% , AC 100~120V, 400Hz ±10% 226×200×125mm, Approx. 2.9kg 226×200×166mm, Approx. 3.3kg		
Dimension & Weight		(if amplifier power is selected)		

Standard Accessories

Power Cord	1
BNC cable	1
CD(software+manual)	1

Options

TCXO	$\pm 1\text{ppm}$ accuracy, $\pm 1\text{ppm/year}$ aging rate
Power Amplifier	2 times power amplifier, Max output power 8W (8 Ω)
IOT interface	Based on LoRa