



TFG6700 Series Function/Arbitrary Waveform Generator

Features

- 625 MSa/s sample rate, 16bit vertical resolution and 32 Mpts arbitrary length
- Amplitude is upto 24 Vpp with 0.1 mVpp resolution
- Economic type with improved performance

Specification

		TFG6702	TFG6703	TFG6704	TFG6706
Frequency					
Sine		1 μ Hz~20 MHz	1 μ Hz~30 MHz	1 μ Hz~40 MHz	1 μ Hz~60 MHz
Square					1 μ Hz~40 MHz
Pulse		1 μ Hz~10 MHz	1 μ Hz~10 MHz	1 μ Hz~10 MHz	1 μ Hz~25 MHz
Others					1 μ Hz~20 MHz
Resolution		1 μ Hz			
Accuracy		$\pm(25 \text{ ppm} + 34 \text{ p Hz})$			
Waveform					
Type		166 kinds include: Sine, Square, Ramp, Pulse, Noise, DC, PRBS, user-defined arbitrary waveform, user-defined harmonic, etc.			
Sample Rate		625 MSa/s			
Vertical Resolution		16 bits			
Arbitrary	Sample Rate	625 MSa/s (jump-point sample); 1 μ Sa/s~312.5 MSa/s (poing-to-point sample)			
	Length	2-32 Mpts			
	Resolution	16 bits			
Squire	Rise/Fall Time	$\leq 3 \text{ ns (typ.)}$			
	Duty Cycle	0.0001 %~99.9999 %			
Pulse	Rise/Fall Time	$\geq 3 \text{ ns}$			
	Duty Cycle	8 ns ~(period-8ns)			

Amplitude

Range	2 mVpp~24 Vpp, frequency≤10 MHz 2 mVpp~12 Vpp, frequency>10 MHz
Resolution	0.1 mVpp or 4 digits
Accuracy	±(1% of setting+1mV), Sine 1kHz,0V offset,≥10mVpp

DC Offset (High-Z)

Range	±12 Vpk (ac+dc)
Resolution	0.1 mVdc or 4 digits
Accuracy	±(setting value ×1 % + amplitude value×0.5 % + 2 mV)

Sweep

Range	1 μHz ~ upper frequency limits
Type	Linear, logarithmic, step
Time	1ms to 500s

Burst

Mode	Triggered, Gated
Period	1μs ~ 999.9s
Count	1~2 ³¹ -1

Modulation

FM, AM,PM,PWM,SUM	Carrier Waveform	Sine, Square, Ramp (only pulse for PWM), etc.
	Modulation Waveform	Sine, Square, Ramp, etc.
	Modulation Frequency	1 mHz to 100 kHz
FSK,4FSK,NFSK,PSK,4PSK,NPSK,ASK,OSK	Carrier Waveform	Sine, Square, Ramp, etc.
	Hop Frequency	1 μHz to upper limits
	Hop Rate	1 mHz to 1 MHz

Counter

Frequency Range	1 mHz to 300 MHz (DC Couple) 10 Hz to 300 MHz (AC Couple)
Resolution	8 digits/s
Period and Pulse Width Measurement	100 ns to 20 s
Duty Cycle Measurement	0.1 % to 99.9 %

General Characteristic

Power	100 V~240 V,50/60 Hz(1±10 %); 100V~120V,400Hz(1±10%) <45 VA; <80 VA (with optional P/A)
Dimension & Weight	256×105×321 mm, approx. 2.4 kg/2.6 kg (with optional P/A)

Options

TCXO	±1 ppm accuracy, ±1 ppm/year aging rate
Power Amplifier	2 times power amplifier, Max output power 8 W (8 Ω)

Standard Accessories

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



Power Cord



BNC Cable



CD