

TFG1900B Series Function Generators



Features

- Simple structure and highly cost-effective
- Output 16 waveforms
- FM, AM, PM, PWM and FSK modulation
- Provide frequency sweep and burst
- Standard configuration interface: USB device

Options

Power Amplifier (output power: 10W)

Specification

		TFG1903B	TFG1905B	TFG1910B	TFG1920B
Frequency					
Range	Sine	10 μ Hz ~ 3MHz	10 μ Hz ~ 5MHz	10 μ Hz ~ 10MHz	10 μ Hz ~ 20MHz
	Square	10 μ Hz ~ 5MHz			
	others	10 μ Hz ~ 1MHz			
Resolution	10 μ Hz				
Accuracy	\pm 50ppm				
Waveform					
Type	16 waveform, Sine, Square, Ramp, Exp, Log, Noise, etc.				
Length	1024 points				
Sampling Rate	100 MSa/s				
Vertical Resolution	8 bits				
Sine	Harmonic Distortion	\leq -40dBc(\leq 5MHz); \leq -35dBc($>$ 5MHz)			
	Total Distortion	\leq 0.5% (20Hz ~ 20kHz, 20Vpp)			
Square	Rise/Fall Time	\leq 35ns Overshoot: \leq 10 %			
	Duty Cycle	0.1% ~ 99.9%			
Ramp	Symmetry	0.0% ~ 100.0%			
Amplitude					
Range	Frequency \leq 8MHz	0 ~ 10Vpp(50 Ω), 0 ~ 20Vpp(Open circuit)			
	Frequency $>$ 8MHz	0 ~ 9Vpp (50 Ω), 0 ~ 18Vpp(Open circuit)			
Resolution	5mVpp(Amplitude $>$ 2Vpp)				
	0.5mVpp(Amplitude \leq 2Vpp)				
DC Offset (Ampl. 0Vpp)					
Range	\pm 5Vdc (50 Ω), \pm 10Vdc (Open circuit)				
Resolution	5mVdc				
Modulation					
FM,AM,	Carrier Waveform	16 waveforms, Sine, Square, Ramp, etc. (only Pulse for PWM)			
PM,PWM	Modulating Waveform	16 waveforms, Sine, Square, Ramp, etc.			
	Modulating Frequency	40mHz ~ 20kHz			
FSK	Carrier Waveform	16 waveforms, Sine, Square, Ramp, etc.			
	Modulating Waveform	Square			
	FSK Rate	40mHz ~ 100kHz			
Sweep					
Type	Linear or Logarithmic				
Sweep Time	50ms ~ 500s				
Trigger Source	Internal/External/Manual				
Burst					
Waveform	16 waveforms, Sine, Square, Ramp, etc.				
Burst Count	1 ~ 1000000				
Internal Period	1 μ s ~ 20s				
Start Phase	0 $^{\circ}$ ~ 360 $^{\circ}$				
Trigger Source	Internal/External/Manual				
Sync Output					
Electrical Level	TTL compatible				
Waveform Characteristic	Square, edge time \leq 20ns				
Output Level	low level $<$ 0.3V, high level $>$ 4V				
General Characteristics					
Power	AC 100 ~ 240V, 45 ~ 65Hz, $<$ 20VA				
Display	VFD display				
Dimension & Weight	322 \times 256 \times 102mm, Approx.1.5 kg				