

Function Generators

GW INSTEK

GFG-82xx Series

- 10 & 5 MHz Versions.
- Built In 150MHz Counter.
- Int/Ext AM/FM & Sweep Mode (not Model 8250A).
- Variable DC Offset Control.



AVAILABLE
TO BUY ONLINE

		GFG-8210	GFG-8255A	GFG-8250A
Main	Frequency Range	0.1Hz~10MHz	0.5Hz~5MHz	
	Amplitude	> 10Vpp (into 50Ω Load)		
	Impedance	50Ω ± 10%		
	Attenuator	-20dB ± 1dBx2		
	DC Offset	<-5V ~ >5V (into 50Ω Load)		
	Duty Control	15% ~ 85%: up to 1MHz Continuously Variable	20% ~ 80%: up to 1MHz Continuously Variable	
Sine Wave	Distortion	1% Typical	≤ 1%, 0.5Hz ~ 100kHz	
	Flatness	± 0.45dB (± 5%)	≤ 0.3dB, Below 500kHz ≤ 1dB, Below 5MHz	
Triangle Wave	Linearity	≥ 98% to 100kHz ≥ 95%, 100kHz ~ 10MHz	≥ 98%, 0.5Hz ~ 100kHz ≥ 95%, 100kHz ~ 5MHz	
Square Wave	Symmetry	± 2%, 1Hz ~ 100kHz		
	Rise or Fall Time	≤ 50nS at Maximum Output (into 50Ω Load)		
CMOS Output	Max. Frequency	2MHz		
	Level	≤ 4Vpp ~ 14.5Vpp ± 0.5Vpp Adjustable		
	Rise or Fall Time	≤ 120nS		
TTL Output	Level	≤ 3Vpp		
	Fan Out	Up to 20 TTL Loads		
	Rise or Fall Time	≤ 25nS		
VCF (Voltage Controlled Freq.)	Input Voltage	0V ~ 10V ± 1V (100 : 1)		
	Input Impedance	10kΩ ± 10%		
GCV Output Voltage (Gate Controlled Voltage) (Model 8255A only)		Sets the Voltage Between 0V ~ 2V as Per Different Frequency		
Sweep Operation (not Model 8250A)	Sweep Rate	> 100 : 1 Ratio Max & Adjustable		
	Sweep Time	0.5Sec ~ 30Sec Adjustable		
	Sweep Mode	Lin. / Log. Switch Selector		
Amplitude Modulation (Model 8255A only)	Depth	0 ~ 100%		
	Modulation Frequency	400Hz (Int), 1MHz (Ext)		
	Carrier Bandwidth	100Hz ~ 5MHz (-3dB)		
	External Sensitivity	≤ 10Vpp for 100% Modulation		
Frequency Modulation (Model 8255A only)	Deviation	0 ~ ±5%		
	Modulation Frequency	400Hz (Int), 1MHz (Ext)		
	External Sensitivity	≤ 10Vpp for 10% Modulation		
Frequency Counter	Range	0.5Hz ~ Maximum Frequency (Int); 5Hz ~ 150MHz (Ext)		
	Accuracy	Time Base Accuracy: ± 1 Count		
	Time Base	± 20ppm (23°C ± 5°C) After 30 Minutes Warm Up		
	Resolution	100nHz for 1Hz, 1Hz for 100MHz		
	Input Impedance	1MΩ//150pF		
	Sensitivity	≤35mVrms (5Hz ~ 100MHz); ≤45mVrms (100MHz ~ 150MHz)		
Physical	Power Source	AC 115V 230V ± 15%, 50 / 60Hz		
	Accessories	Instruction Manual x 1, Power Cord x 1, GTL-101 x 2		
	Dimensions & Weight	251mm (W) x 91mm (H) x 291mm (D), 2.4kg		

ORDERING INFORMATION

GFG-8210	10MHz Function Generator.
GFG-8255A	5MHz Function Generator, with Lin/Log Sweep, GCV Function, AM/FM Modulation.
GFG-8250A	5MHz Function Generator.

Function Generators

GW INSTEK

GFG-82xx Series



AVAILABLE TO BUY ONLINE

- 3 MHz Versions.
- Built In 150MHz Counter (Not GFG-8215A).
- Int/Ext AM/FM & Sweep Mode Available.
- Variable DC Offset Control.

		GFG-8219A	GFG-8217A	GFG-8216A	GFG-8215A
Main	Frequency Range Amplitude Impedance Attenuator DC Offset Duty Control Display	0.3Hz ~ 3MHz (7 Ranges) > 10Vpp (into 50Ω Load) 50Ω ± 10% -20dB ± 1dB x 2 <-5V ~ >5V (into 50Ω Load) 20% ~ 80% to 1MHz Continuously Variable 6 Digit LED Display (no display on GFG-8215A)			
Sine Wave	Distortion Flatness	≤ 1%, 0.3Hz ~ 200kHz < 0.3dB, 0.3Hz ~ 300kHz; < 0.5dB, 300kHz ~ 3MHz			
Triangle Wave	Linearity	≥ 98%, 0.3Hz ~ 100kHz; ≥ 95%, 100kHz ~ 3MHz			
Square Wave	Symmetry Rise or Fall Time	+ 2%, 0.3Hz ~ 100kHz ≤ 100nS at Maximum Output (into 50Ω Load)			
CMOS Output	Level Rise or Fall Time	4Vpp ± 1Vpp ~ 14.5Vpp ± 0.5Vpp, Adjustable ≤ 120nS			
TTL Output	Level Fan Out Rise/Fall Time	≥ 3Vpp Up to 20 TTL Loads ≤ 25nS			
VCF (Voltage Controlled Freq.)	Input Voltage Input Impedance	0V ~ 10V ± 1V (100 : 1) 10k Ω ± 10%			
GCV (GFG-8219 Only)	Output Voltage	Sets the Voltage between 0V ~ 2V for Different Frequencies			
Sweep Operation (GFG-8219 & GFG-8217)	Sweep / Manual Sweep / Rate Sweep / Time Sweep / Mode	Switch Selector 100 : 1 Ratio Max. & Adjustable 0.5 ~ 30S Adjustable Lin. / Log. Switch Selector			
Amplitude Modulation (GFG-8219A Only)	Depth Modulation Frequency Carrier BW EXT Sensitivity	0 ~ 100% 400Hz (INT), DC~1MHz (EXT) 100Hz~3MHz (-3dB) ≤ 10Vpp for 100% Modulation			
Frequency Modulation (GFG-8219A Only)	Deviation Modulation Frequency EXT. Sensitivity	0 ~ ± 5% 400Hz (INT), DC ~ 20kHz (EXT) ≤ 10Vpp for 10% Modulation			
Frequency Counter	INT / EXT Range Accuracy Time Base Resolution Input Impedance Sensitivity	Switch Selector 0.3Hz~3MHz (5Hz~150MHz EXT) Time Base Accuracy ± 1 Count ± 20ppm (23°C ± 5°C) After 30 Minutes Warm Up 100nHz for 1Hz, & 1Hz for 100MHz 1MΩ // 150pF ≤ 35mVrms (5Hz~100MHz), ≤ 45mVrms (100MHz~150MHz)			N/A
General	Power Source Accessories Dimensions Weight	AC 115V / 230V ± 15%, 50/60Hz Instruction Manual x 1, Power Cord x 1 GTL-101 x 2 (x 1 on GFG-8215A) 251mm (W) x 91mm (H) x 291mm (D) 2.2kg			

ORDERING INFORMATION

GFG-8219A	3MHz Function Generator with GCV Function, AM/FM Modulation & Sweep Mode.
GFG-8217A	3MHz Function Generator with Sweep Mode.
GFG-8216A	3MHz Function Generator with 6 Digit LED Display.
GFG-8215A	3MHz Function Generator.