



GFG-8255A (5MHz)
GFG-8219A (3MHz)



GFG-8250A (5MHz)
GFG-8216A (3MHz)



FEATURES

- * Frequency Range: 0.3Hz ~ 3MHz (GFG-8215A/8216A/8217A/8219A)
- * Frequency Range: 0.5Hz ~ 5MHz (GFG-8250A/8255A)
- * Waveforms: Sine, Triangle, Square, Ramp, TTL and CMOS Output
- * External Voltage Controlled Frequency (VCF) Function
- * Duty Cycle Control with Signal Inversion Capability
- * Variable DC Offset Control
- * Two-Step (-20dBx2) and Variable attenuator
- * Built-in 6 Digit Counter with INT/EXT Function up to 150MHz (Except GFG-8215A)
- * LIN/LOG Sweep Mode (GFG-8217A/8219A/8255A)
- * INT/EXT AM/FM Modulation (GFG-8219A/8255A)
- * GCV Output for Synchronization (GFG-8219A/8255A)

GFG-8200A product family offers a complete solution in generating signals at the frequency ranges of 3&5 MHz. All models are embedded with standard functions such as TTL/CMOS/Ramp output, External Voltage Controlled Frequency (VCF), as well as built-in 6-digit counter (except GFG-8215A). Further versatility of Logarithmic and Linear sweep is added into GFG-8255A/8219A/8217A, while GCV output feature and AM/FM modulation are available in GFG-8255A/8219A. All these integrated functions and user-friendly operations of the GFG-8200A series are made to accommodate the applications in audio response testing, vibration testing, servo system evaluation, ultra sound applications, and so forth.

SPECIFICATIONS		
MODEL	GFG-8215A/8216A/8217A/8219A	GFG-8250A / 8255A
MAIN		
Frequency Range	0.3Hz ~ 3MHz (7 Range)	0.5Hz ~ 5MHz (7 Range)
Amplitude	> 10Vpp (into 50 load)	> 10Vpp (into 50 load)
Impedance	50 ±10%	50 ±10%
Attenuator	-20dB ±1dBx2	-20dB ±1dBx2
DC Offset	<-5V ~ >5V (into 50 load)	<-5V ~ >5V (into 50 load)
Duty Control	80% : 20% : 80% to 1MHz Continue variable	80% : 20% : 80% to 1MHz Continue variable
Display	6 digit LED display *GFG-8215A does not have display.	6 digit LED display
Range Accuracy	±5%+1Hz (at 3 position) *only for GFG-8215A	
SINE WAVE		
Distortion	≤ 1%, 0.3Hz ~ 200kHz THD ≤ 35dB below fundamental in all range (Specification applied from MAX. to 1/10 level)	≤1%, 0.5Hz ~ 100kHz THD ≤ 30dB below fundamental in all range (Specification applied from MAX. to 1/10 level)
Flatness	< 0.3dB, 0.3Hz ~ 300kHz < 0.5dB, 300kHz ~ 3MHz	≤0.3dB, below 500kHz ≤1dB, below 5MHz
TRIANGLE WAVE		
Linear	≥ 98%, 0.3Hz ~ 100kHz ≥ 95%, 100kHz ~ 3MHz	≥ 98%, 0.5Hz ~ 100kHz ≥ 95%, 100kHz ~ 5MHz
SQUARE WAVE		
Symmetry	+ 2%, 0.3Hz ~ 100kHz	+ 2%, 1Hz ~ 100kHz
Rise or Fall Time	≤ 100nS at maximum output (into 50 load)	≤ 50nS at maximum output (into 50 load)
CMOS OUTPUT		
Level	4Vpp±1Vpp ~ 14.5Vpp±0.5Vpp adjustable	4Vpp±1Vpp ~ 14.5Vpp±0.5Vpp adjustable
Rise or Fall Time	≤ 120nS	≤ 120nS
TTL OUTPUT		
Level	≥ 3Vpp	≥ 3Vpp
Fan Out	20 TTL load	20 TTL load
Rise or Fall Time	≤ 25nS	≤ 25nS
VCF (Voltage Controlled Frequency)		
Input Voltage	0V ~ 10V ±1V (100 : 1)	0V ~ 10V ±1V (100 : 1)
Input Impedance	10k ±10%	10k ±10%
GCV (Generator Controlled Voltage) (GFG-8219A/8255A)		
Output Voltage	To set the voltage between 0V ~ 2V as per different frequency	To set the voltage between 0V ~ 2V as per different frequency
SWEEP OPERATION (GFG-8217A/8219A/8255A)		
Sweep/Manual	Switch selector	Switch selector
Sweep/Rate	100 : 1 ratio max. and adjustable	100 : 1 ratio max. and adjustable
Sweep/Time	0.5sec. ~ 30sec. adjustable	0.5sec. ~ 30sec. adjustable
Sweep/Mode	Lin./Log. switch selector	Lin./Log. switch selector
AMPLITUDE MODULATION (GFG-8219A/8255A)		
Depth	0 ~ 100%	0 ~ 100%
MOD. Frequency	400Hz (INT), DC ~ 1MHz (EXT.)	400Hz (INT), DC ~ 1MHz (EXT.)
Carrier BW	100Hz ~ 3MHz (-3dB)	100Hz ~ 5MHz (-3dB)
EXT Sensitivity	≤ 10Vpp for 100% modulation	≤ 10Vpp for 100% modulation

SELECTION GUIDE

MODEL	GFG-8255A	GFG-8250A	GFG-8219A	GFG-8217A	GFG-8216A	GFG-8215A
DISPLAY	6 Digits LED Display					-
WAVEFORM	Sing, Square, Triangle					
FREQUENCY RANGE	5MHz	5MHz	3MHz	3MHz	3MHz	3MHz
LIN/LOG SWEEP	✓		✓	✓		
AM/FM MODULATION	✓		✓			
FREQUENCY COUNTER	✓	✓	✓	✓	✓	
VOLTAGE CONTROL FREQUENCY	✓	✓	✓	✓	✓	✓
GCV OUTPUT	✓		✓			
TTL/CMOS OUTPUT	✓	✓	✓	✓	✓	✓



GFG-8217A (3MHz)



GFG-8215A (3MHz)



SPECIFICATIONS

MODEL	GFG-8215A/8216A/8217A/8219A	GFG-8250A / 8255A
FREQUENCY MODULATION (GFG-8219A/8255A)		
Deviation	0 ~ ±5%	0 ~ ±5%
MOD. Frequency	400Hz(INT), DC ~ 20kHz(EXT.)	400Hz (INT), DC ~ 20kHz(EXT.)
EXT. Sensitivity	≤ 10Vpp for 10% modulation	≤ 10Vpp for 10% modulation
FREQUENCY COUNTER (GFG-8216A/8217A/8219A/8250A/8255A)		
Int./Ext.	Switch selector	Switch selector
Range	0.3Hz ~ 3MHz (5Hz ~ 150MHz EXT.)	0.5Hz ~ 5MHz (5Hz ~ 150MHz EXT.)
Accuracy	Time base accuracy ±1 count	Time base accuracy ±1 count
Time Base	± 20ppm (23 °C ±5 °C) after 30 minutes warm up	± 20ppm (23 °C ±5 °C) after 30 minutes warm up
Resolution	The maximum resolution is 100nHz for 1Hz and 1Hz for 100MHz	The maximum resolution is 100nHz for 1Hz and 1Hz for 100MHz
Input Impedance	1M // 150pF	1M // 150pF
Sensitivity	≤ 35mVrms (5Hz ~ 100MHz) ≤ 45mVrms (100MHz ~ 150MHz)	≤ 35mVrms (5Hz ~ 100MHz) ≤ 45mVrms (100MHz ~ 150MHz)
POWER SOURCE		
	AC115V, 230V ± 15%, 50 / 60Hz	AC115V, 230V ± 15%, 50 / 60Hz
DIMENSION & WEIGHT		
	251(W) x 91(H) x 291(D) Approx. 2.0 kg(GFG-8215A) Approx. 2.1 kg(GFG-8216A) Approx. 2.15kg(GFG-8217A) Approx. 2.2 kg(GFG-8219A)	251(W) x 91(H) x 291(D) Approx. 2.3 kg (GFG-8250A) Approx. 2.4 kg (GFG-8255A)

ORDERING INFORMATION

GFG-8215A	3MHz Function Generator
GFG-8216A	3MHz Function Generator With Counter
GFG-8217A	3MHz Function Generator With Counter & Sweep Mode
GFG-8219A	3MHz Function Generator With Counter, Sweep Mode & AM/FM Modulation
GFG-8250A	5MHz Function Generator With Counter
GFG-8255A	5MHz Function Generator With Counter, Sweep Mode & AM/FM Modulation

ACCESSORIES :

User manual x 1
GTL-101 x 2
GTL-101 x 1 (GFG-8215A)