

# Function Generator



**GFG-8216A (3MHz)**

**GFG-8215A (3MHz)**

## FEATURES

- \* Frequency Range: 0.3Hz ~ 3MHz
- \* 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 / High Resolution(GFG-8216A)

## SPECIFICATIONS

<b>MAIN</b>	
Frequency Range	0.3Hz ~ 3MHz (7 Range)
Amplitude	> 10Vpp (into 50Ω load)
Impedance	50Ω ±10%
Attenuator	-20dB ± 1dBx2
DC Offset	<-5V ~ >5V (into 50Ω load)
Duty Control	80% : 20% : 80% to 1MHz Continue variable
Display	6 digit LED display *GFG-8215A does not have display.
Range Accuracy	± 5%+1Hz (at 3 position) for GFG-8215A
<b>SINE WAVE</b>	
Distortion	≤ 1%, 0.3Hz ~ 200kHz
Flatness	< 0.3dB, 0.3Hz ~ 300kHz < 0.5dB, 300kHz ~ 3MHz
<b>TRIANGLE WAVE</b>	
Linear	≥ 98%, 0.3Hz ~ 100kHz ≥ 95%, 100kHz ~ 3MHz
<b>SQUARE WAVE</b>	
Symmetry	± 2%, 0.3Hz ~ 100kHz
Rise or Fall Time	≤ 100nS at maximum output (into 50Ω load)
<b>CMOS OUTPUT</b>	
Level	4Vpp ±1Vpp ~ 14.5Vpp ±0.5Vpp adjustable
Rise or Fall Time	≤ 120nS
<b>TTL OUTPUT</b>	
Level	≥ 3Vpp
Fan Out	20 TTL load
Rise or Fall Time	≤ 25nS
<b>VCF</b>	
Input Voltage	0V ~ 10V ±1V (100 : 1)
Input Impedance	10kΩ ±10%
<b>FREQUENCY COUNTER(For GFG-8216A Only)</b>	
INT./EXT.	Switch selector
Range	0.3Hz ~ 3MHz (5Hz ~ 150MHz EXT.)
Accuracy	Time base accuracy ± 1 count
Time Base	± 20ppm(23° C ±5 °C)after 30 minutes warm up
Resolution	The maximum resolution is 100nHz for 1Hz and 1Hz for 100MHz
Input Impedance	1MΩ // 150pF
Sensitivity	≤ 35mVrms (5Hz ~ 100MHz) ≤ 45mVrms (100MHz ~ 150MHz)

<b>POWER SOURCE</b>	AC115V/230V ± 15%, 50/60Hz
<b>ACCESSORIES</b>	Instruction manual x 1, Power cord x 1, GTL-101 x 2; GTL-101x1 for GFG-8215A
<b>DIMENSIONS &amp; WEIGHT</b>	251(W) x 91(H) x 291(D)mm, Approx. 2.1kg

<b>ORDERING INFORMATION</b>	
<b>GFG-8216A</b>	3MHz Function Generator with 6Digit LED Display
<b>GFG-8215A</b>	3MHz Function Generator