

## 2MHz Function Generator



GFG-8020H (2MHz)



### FEATURES

- \* Frequency Range: 0.2Hz ~ 2MHz
- \* Coarse and Fine Tuning
- \* Waveform : Sine, Triangle, Square, TTL Pulse
- \* CMOS Output
- \* Built-in 4 Digits Counter(INT only)
- \* Large 0.5" LED Display
- \* Variable DC Offset Control
- \* Output Overload Protection
- \* VCF Input Function

The GFG-8000 Series function generators deliver the most economic solution available for generating signals in the range of 0.2Hz ~ 2MHz. This series consists of the GFG-8020H and GFG-8015G.

GFG-8020H includes a CMOS output, a built-in 4-digit counter, a coarse/ fine tuning knob and an LED display.

Together with standard functions such as variable DC offset control, output load protection and VCF input, the GFG-8020H is the most economical choice for both education and industry.

SPECIFICATIONS	
<b>MAIN OUTPUT</b>	
Waveforms	SINE, TRIANGLE, SQUARE, TTL pulse and CMOS output
Amplitude	>20Vp-p (open circuit) ; >10Vp-p (into 50Ω load)
Impedance	50Ω±10%
Attenuator	-20dB ± 1.0dB (at 1kHz)
DC Offset	<-10V to > +10V (<-5V to > +5V into 50Ω load)
Duty Control	1:1 to 10:1 continuously adjustable
Display	4 digits LED display
Frequency Range	0.2Hz to 2MHz 7 ranges
Frequency control	Separate coarse and fine tuning
<b>SINE WAVE</b>	
Distortion	<1% (0.2Hz ~ 20kHz), <2% (20kHz ~ 200kHz)
Frequency Response	<0.2dB (0.2Hz ~ 100kHz), <1dB (100kHz ~ 2MHz)
<b>TRIANGLE WAVE</b>	
Linear	98% (0.2Hz ~ 100kHz), 95% (100kHz ~ 2MHz)
<b>SQUARE WAVE</b>	
Symmetry	<2%, 0.2Hz ~ 100kHz
Rise/Fall Time	<120ns
<b>CMOS OUTPUT</b>	
Level	(4Vp-p±1Vp-p) ~ (14.5Vp-p±0.5Vp-p) adjustable
Rise/Fall Time	<120ns
<b>TTL OUTPUT</b>	
Level	>3Vp-p
Rise/Fall Time	<30ns
<b>VCF (Voltage Controlled Frequency)</b>	
Input Voltage	Approx. 0V ~ 10V (±1V) input for 10:1 frequency ratio
Input Impedance	10kΩ ±10%
<b>FREQUENCY COUNTER</b>	
Mode	Internal only
Range	0.2Hz ~ 2MHz
Accuracy	Time base accuracy ±1Count
Time Base	Oscillation frequency 3.58MHz, Temp. stability ±20PPM (23°C±5°C)
Resolution	0.1Hz, 1Hz, 10Hz, 100Hz, 1kHz
<b>POWER SOURCE</b>	
AC100V/120V/220V/230V±10%, 50/60Hz	
<b>DIMENSIONS &amp; WEIGHT</b>	
230(W) x 95(H) x 280(D) mm, Approx. 2.1kg	

### ORDERING INFORMATION

**GFG-8020H** 2MHz Function Generator with 4 Digits LED Display, TTL/CMOS Output  
 ACCESSORIES :  
 User manual x 1, Power cord x 1, Test lead GTL-101 x 1

GFG-8015G includes TTL output with a 1000:1 tuning range, variable DC offset control, output load protection and VCF input. The GFG-8015G is also competitively price for education and industry.



GFG-8015G (2MHz)



### FEATURES

- \* Frequency Range : 0.2Hz ~ 2MHz
- \* Waveforms : Sine, Triangle, Square, TTL Pulse
- \* Variable DC Offset Control
- \* Output Overload Protection
- \* VCF Input Function
- \* 1000 : 1 Tuning Range
- \* Two-Steps Attenuator Plus Variable Control

SPECIFICATIONS	
<b>MAIN OUTPUT</b>	
Waveforms	SINE, TRIANGLE, RAMP, SQUARE and TTL pulse Output
Amplitude	>20Vp-p (open circuit). > 10Vp-p (into 50Ω load)
Impedance	50Ω±10%
Attenuator	-20dB, -20dB±1.0dB (at 1kHz)
DC Offset	<-10V ~ > +10V (<-5V ~ >+5V into 50 Ωload)
Duty Control	1:1 ~ 10:1 continuously rating
Frequency Range	0.2Hz ~ 2MHz 7 ranges
Range Accuracy	±5% + 1Hz (0.2, 2.0 position)
<b>SINE WAVE</b>	
Distortion	<1% 0.2Hz ~ 200kHz
Frequency Response	<0.1dB 0.2Hz ~ 100kHz <0.5dB 100kHz ~ 2MHz
<b>TRIANGLE WAVE</b>	
Linear	98% (0.2Hz ~ 100kHz), 95% (100kHz ~ 2MHz)
<b>SQUARE WAVE</b>	
Symmetry	<2%, 0.2Hz ~ 100kHz
Rise/Fall Time	<100ns
<b>TTL OUTPUT</b>	
Level	>3Vp-p
Rise/Fall Time	<25ns
<b>VCF (Voltage Controlled Frequency)</b>	
Input Voltage	Approx. 0 ~ 10V ± 1V input for 1000 : 1 ; frequency ratio
Impedance	10kΩ (±10%)
<b>POWER SOURCE</b>	
AC100V/120V/220V/230V±10%, 50/60Hz	
<b>DIMENSIONS &amp; WEIGHT</b>	
230(W) x 95(H) x 280(D) mm, Approx. 2.0kg	

### ORDERING INFORMATION

**GFG-8015G** 2MHz Function Generator  
 ACCESSORIES :  
 User manual x 1, Power cord x 1, Test lead GTL-101 x 1