

# FUNCTION GENERATOR

## Function Generator



GFG-8020H (2MHz)

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



GFG-8016G (2MHz)

- \* Frequency Range: 0.2Hz ~ 2MHz
- \* Three Instruments in one, Function Generator, Pulse Generator & Frequency Counter
- \* Sine, Triangle, Square, TTL Pulse and CMOS Output
- \* Built-in 6 Digit Counter with INT/EXT Function
- \* 1000:1 Tuning Range
- \* Variable DC Offset Control
- \* Output Overload Protection

### SPECIFICATIONS

<b>MAIN OUTPUT</b>	<b>Waveforms</b> <b>Amplitude</b> <b>Impedance</b> <b>Attenuator</b> <b>DC Offset</b> <b>Duty Control</b> <b>Display</b> <b>Frequency Range</b> <b>Frequency control</b>	SINE, TRIANGLE, SQUARE, TTL pulse and CMOS output >20Vp-p (open circuit) >10Vp-p (into 50W load) 50W ±10% -20dB ± 1.0dB (at 1kHz) <-10V to > +10V (<-5V to > +5V into 50W load) 1:1 to 10:1 continuously rating 4 digits LED display (GFG-8020H); 6 digits LED display (GFG-8016G) 0.2Hz to 2MHz 7 ranges Separate coarse and fine tuning (GFG-8020H)
<b>SINE WAVE</b>	<b>Distortion</b> <b>Frequency Response</b>	<1% 0.2Hz ~ 20kHz, <2% 20kHz ~ 200kHz (GFG-8020H) <1% 0.2Hz ~ 200kHz (GFG-8016G) <0.2dB 0.2Hz ~ 100kHz, <1dB 100kHz ~ 2MHz (GFG-8020H) <0.1dB 0.2Hz ~ 100kHz, <0.5dB 100kHz ~ 2MHz (GFG-8016G)
<b>TRIANGLE WAVE</b>	<b>Linear</b>	98% 0.2Hz ~ 100kHz, 95% 100kHz ~ 2MHz
<b>SQUARE WAVE</b>	<b>Symmetry</b> <b>Rise/Fall Time</b>	<2% 0.2Hz ~ 100kHz <120nS
<b>CMOS OUTPUT</b>	<b>Level</b> <b>Rise/Fall Time</b>	(4Vp-p ±1Vp-p) ~ (14.5Vp-p ±0.5Vp-p) adjustable <120nS
<b>TTL OUTPUT</b>	<b>Level</b> <b>Rise/Fall Time</b>	>3Vp-p <30nS (GFG-8020H) <25nS (GFG-8016G)
<b>V.C.F.</b>	<b>Input Voltage</b> <b>Input Impedance</b>	Approx. 0V ~ 10V (±1V) input for 10:1 frequency ratio (GFG-8020H) Approx. 0V ~ 10V (±1V) input for 1000:1 frequency ratio (GFG-8016G) 10kΩ ± 10%
<b>FREQUENCY COUNTER</b>	<b>Mode</b> <b>Range</b> <b>Accuracy</b> <b>Time Base</b> <b>Resolution</b> <b>Sensitivity</b>	Internal only (GFG-8020H) INT/EXT. switchable (GFG-8016G) 0.2Hz ~ 2MHz (GFG-8020H) 0.2Hz (5Hz EXT)~10MHz (GFG-8016G) ±Time base accuracy ±1 Count Oscillation frequency 3.58MHz, Temp.stability ± 20PPM (23°C ± 5°C)(GFG-8020H) Oscillation frequency 10MHz, Temp.stability ± 10PPM (23°C ± 5°C)(GFG-8016G) 0.1Hz, 1Hz, 10Hz, 100Hz, 1kHz (GFG-8020H) 0.1Hz, 1Hz, 10Hz, 100Hz (GFG-8016G) ≤ 25mVrms (GFG-8016G)
<b>POWER SOURCE</b>		AC100V/120V/220V/230V ±10%, 50/60Hz
<b>ACCESSORIES</b>		Power cord x 1, Instruction manual x 1, GTL-101 x 1(GFG-8020H) GTL-101 x 2 (GFG-8016G)
<b>DIMENSIONS &amp; WEIGHT</b>		230(W) x 95(H) x 280(D) mm, Approx. 2.1kg