

PROGRAMMABLE FUNCTION GENERATOR

GF-855 is a functional Function generator that applies Frequency feedback control system technique and can generate high frequency accuracy with high resolution. Its main signal source can generate waveforms including sine wave, square wave, triangle wave, and ramp wave.

- All digitized operation user interface
- Wide output frequency range 0.01Hz ~ 15MHz.
- High frequency accuracy 0.02% ± 5 count.
- Maximum frequency resolution 10mHz.
- Dual displays indicate frequency and amplitude or other necessary information.
- Built-in 6-digit INT/EXT Function Counter and up to 150 MHz frequency range with high resolution.
- INT/EXT AM/FM Modulation with internal modulation signal output.
- LIN/LOG Sweep Mode with internal sweep signal output.
- VCF of 100:1 EXT Frequency Control.
- SYNC Output.



- TTL output.
- Synchronization GCV Output.
- Variable DC Offset Control.
- RS232 Interface Standard.

Specifications	GF-855	Sine	
Output Waveforms	Sine, Square, Triangle, ± Ramp, Pulse, AM, FM, Sweep, Trigger, Gate or Burst	Sine Distortion	≤ 0.5 % (-46 dBc) from 10 Hz ~ 100 kHz ≤ -30 dBc to 15 MHz (spec. applied form 1 Vpp to 10 Vpp)
Frequency range	10 mHz ~ 15 MHz in 8 Frequency Range (auto switch)	Square Asymmetry Rise / Fall Time	± 1% of period + 3 ns < 18 nSec
Frequency resolution	1.5001 MHz ~ 15.0000 MHz ... (100 Hz) 150.01 kHz ~ 1.50000 MHz ... (10 Hz) 15.001 kHz ~ 150.000 kHz ... (1 Hz) 1.5001 kHz ~ 15.0000 kHz ... (0.1 Hz) 150.01 Hz ~ 1.50000 kHz ... (10 MHz) 15.01 Hz ~ 150.00 Hz ... (10 MHz) 1.51 Hz ~ 15.00 Hz ... (10 MHz) 0.01 Hz ~ 1.50 kHz ... (10 MHz)	Triangle and Ramp Linearity Error	≤ 1% of full scale output at 100 Hz
Frequency accuracy	0.02 % ± 5 count	Sweep Sweep mode Sweep range	Linear or Log sweep 150 kHz ~ 15 MHz 15 kHz ~ 1.5 MHz 1.5 kHz ~ 150 kHz 150 Hz ~ 15 kHz 15 Hz ~ 1.5 kHz 1.5 Hz ~ 150 Hz 0.15 Hz ~ 15 Hz 0.01 Hz ~ 1.5 Hz
Output impedance	50 Ω ± 10%.	Width Frequency Symmetry Control Sweep output	> 100:1 (in same frequency range) 0.01 Hz ~ 10 kHz 90:10:90; Resolution: 1% 0 to ≥ -5 Vpp into 10 kΩ
Amplitude Range Resolution Accuracy Unit	10.00 V ~ 0.01 V (into 50 Ω) 4 amplitude ranges 10 mV (10.00 V ~ 0.01 V) ≤ 3% ± 5 count at 10 Hz ~ 1 MHz ≤ 10% ± 5 count at 1 MHz ~ 15 MHz Vpp, Vrms, dBm	Modulation Types	AM, FM, Sweep, Trigger (int/ext), Gate or Burst (implement by trigger type)
DC Offset Range Resolution Accuracy	± 5 V (into 50 Ω) 10 mV ≤ 3% ± 3 count at Amplitude Min	Waveform	Sine, Square, Triangle, Ramp or Variable Symmetry Pulse
Duty Control Range Resolution Accuracy	80 % : 20 % : 80 % to 1 MHz 1%. ≤ 1 % to 1 MHz at 50 % Duty	Rate Frequency Range Frequency Accuracy Frequency Resolution	10 mHz ~ 10 kHz in 3 Frequency Range (auto switch) 5 % ± 1 count 10.0 kHz ~ 0.1 kHz (100 Hz) 99 Hz ~ 1 Hz (1 Hz) 0.99 Hz ~ 0.01 Hz (0.01 Hz)
Sync Output Impedance Level	50 Ω ± 10 %. > 1 Vpp open circuit	Symmetry Resolution	90%:10%:90% 1%

SPECIFICATIONS

Symmetry Accuracy Output Level Sine Wave Distortion Amplitude modulation Depth Frequency modulation Carrier frequency (3dB) External Sensitivity Frequency modulation Deviation Modulation Frequency External Sensitivity	± 1 count ($\leq 1\%$). ≥ 1 Vpp into 10 k Ω load. $\leq 2\%$ from 10 Hz to 10 kHz 0 ~ 100 % 0.01 Hz ~ 10 kHz (INT) DC ~ 1 MHz (EXT) <100 Hz to > 5 MHz ≤ 10 Vpp for 100 % modulation 0 ~ $\pm 15\%$ 0.01 Hz ~ 10 kHz (INT) DC ~ 50 kHz (EXT) ≤ 5 Vpp for 15 % deviation	Frequency Counter INT/EXT Range Accuracy Time Base Resolution Input Impedance Sensitivity	Switch selector 5 Hz ~ 150 MHz EXT Time Base (10 MHz) Accuracy ± 1 count. ± 20 ppm (23 °C ± 5 °C) after 30 minutes warm up The maximum resolution is 100 nHz for 1 Hz and 1 Hz for 100 MHz 1 M Ω // 150 pF ≤ 35 mVrms (5 Hz ~ 100 MHz) ≤ 45 mVrms (100 MHz ~ 150 MHz)
		Interface	RS-232
Trigger Start / Stop Phase Range Frequency Margen de frecuencia Ext. Trig. Frequency Range Gate of Burst	- 90 ° ~ + 80° 0.01 Hz ~ 10 kHz 0.1 Hz ~ 1 MHz (Useful to 10 MHz) DC to 1 MHz, TTL compatible input level Implement by Trigger setting	Power Supply	115 / 230 V AC $\pm 15\%$, 50/60 Hz
		Operating Environmental Conditions Altitude Temperature range Max. relative humidity	Up to 2000 m From 0 °C to 40 °C 85% (up to 31 °C), decreasing lineally up to 10% at 40 °C
VCF Range Input linearity Input impedance	100:1 (0 to 10 V ± 1 V) in same frequency range < 0,5 % a m1 MHz, < 5 % to 10 MHz 10 k Ω	Mechanical Features Dimensions Weight	290 (W) x 142 (H) x 346 (D) mm 5 kg Approximately
TTL output Level Fan-out	≥ 3 Vpp. > 10 TTL load	Accessories User's Manual GTL-101 (2 units) Power cord	CA-005
GCV output	To set the voltage between 0.2 V to 2 V as per different Frequency in Same frequency Range		