

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% $\pm$ 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 Distortion	$\leq 0.5\%$ (-46 dBc) from 10 Hz ~ 100 kHz ≤ -30 dBc to 15 MHz (spec. applied from 1 Vpp to 10 Vpp)
Output Waveforms	Sine, Square, Triangle, $\pm$ Ramp, Pulse, AM, FM, Sweep, Trigger, Gate or Burst	Square Asymmetry Rise / Fall Time	$\pm 1\%$ of period + 3 ns < 18 nSec
Frequency range	10 mHz ~ 15 MHz in 8 Frequency Range (auto switch)	Triangle and Ramp Linearity Error	$\leq 1\%$ of full scale output at 100 Hz
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)	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
Frequency accuracy	0.02 % $\pm$ 5 count	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 k Ω
Output impedance	50 Ω $\pm$ 10%.	Modulation Types	AM, FM, Sweep, Trigger (int/ext), Gate or Burst (implement by trigger type)
Amplitude Range	10.00 V ~ 0.01 V (into 50 Ω) 4 amplitude ranges	Waveform	Sine, Square, Triangle, Ramp or Variable Symmetry Pulse
Resolution	10 mV (10.00 V ~ 0.01 V)	Rate Frequency Range	10 mHz ~ 10 kHz in 3 Frequency Range (auto switch)
Accuracy	$\leq 3\% \pm 5$ count at 10 Hz ~ 1 MHz $\leq 10\% \pm 5$ count at 1 MHz ~ 15 MHz Vpp, Vrms, dBm	Frequency Accuracy	5 % $\pm$ 1 count
Unit		Frequency Resolution	10.0 kHz ~ 0.1 kHz (100 Hz) 99 Hz ~ 1 Hz (1 Hz) 0.99 Hz ~ 0.01 Hz (0.01 Hz) 90%:10%:90% 1%
DC Offset Range	± 5 V (into 50 Ω)	Symmetry Resolution	
Resolution	10 mV		
Accuracy	$\leq 3\% \pm 3$ count at Amplitude Min		
Duty Control Range	80 % : 20 % : 80 % to 1 MHz		
Resolution	1%.		
Accuracy	$\leq 1\%$ to 1 MHz at 50 % Duty		
Sync Output Impedance	50 Ω $\pm$ 10 %.		
Level	> 1 Vpp open circuit		

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	GCV output	To set the voltage between 0.2 V to 2 V as per different Frequency in Same frequency Range
		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
		Power Supply	115 / 230 V AC $\pm 15\%$, 50/60 Hz
		Mechanical Features Dimensions Weight	290 (W) x 142 (H) x 346 (D) mm 5 kg Approximately
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	Accessories User's Manual GTL-101 (2 units) Power cord	CA-005
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		
TTL output Level Fan-out	≥ 3 Vpp. > 10 TTL load		