

SWEEP FUNCTION GENERATOR



FG-8102



FG-8105



FG-8110

Features

MODEL	BANDWIDTH	FREQUENCY COUNTER
FG-8102	0.02Hz ~ 2MHz	50MHz
FG-8105	0.05Hz ~ 5MHz	100MHz
FG-8110	0.1Hz ~ 10MHz	110MHz

- **4-in-1 Sweep, Function & Pulse Generator and Frequency Counter**
- **Versatile waveforms for Sine, Square, Triangle, Ramp, Pulse, Sawtooth and DC outputs**
- **CMOS (FG-8102 only)**
- **Built in 7digits External Counter Display measuring up to 110MHz**
- **Internal and External linear Sweep control from 1:1 to 100:1**
- **Variable Symmetry for generating Sawtooth and Pulse waveforms**
- **TTL leveled Square waveform output**
- **Variable DC Offset control**
- **Variable Output level control with 20 dB Attenuator and Amplitude control**

Technical Specification

Model		FG-8102	FG-8105	FG-8110
Output Characteristics				
Waveforms		Sine, Square, Triangle, Ramp, Pulse, Sawtooth, TTL Leveled Square, DC CMOS (FG-8102 only)		
Frequency Range		0.02Hz to 2MHz in 7 Range	0.05Hz to 5MHz in 7 Range	0.1Hz to 10MHz in 7 Range
Frequency Accuracy		± 5% of full scale		
Output Level		20Vp-p in open circuit, 10Vp-p into 50Ω Load		
DC Offset Control		More than +/-5V (into 50ohm)		
Output Impedance		50Ω±5%		
Attenuator		-20dB fixed and continuously variable		
Waveform Characteristics				
Sine wave	Flatness	±0.3dB to 2MHz	±0.3dB to 5MHz	±0.3dB to 10MHz
	Distortion	Less than 1% at 0.1Hz to 100KHz		
Square wave	Rise and Fall time	Less than 120nSec	Less than 25nSec	Less than 25nSec
Triangle wave	Linearity	More than 99% at 0.1Hz to 100 kHz		
TTL Output	Rise and Fall time	Less than 25nSec		
	Output Level	TTL Level (H ; Higher than 2.4V, L ; Lower than 0.4V)		
CMOS Output Level (FG-8102 only)		5 to 15V ±2V		
Symmetry Variation		1 :1 to 10 : 1		
Sweep Function Characteristics				
Mode		Linear		
Width		Variable from 1 :1 to 100 : 1		
Rate		0.5Hz to 50Hz(20mSec to 2Sec)		
External VCF Input	Input Voltage	0 to 10V		
	Input Impedance	Approx. 10 Kohm		
Frequency Counter Characteristics				
Display		6digit Green LED, Overflow, Gate time, MHz, kHz, Hz, mHz (FG-8102) 7digit Green LED, Overflow, Gate time, MHz, kHz, Hz, mHz (FG-8105 & FG-8110)		
Frequency Range		200mHz to 50MHz	200mHz to 100MHz	200mHz to 110MHz
Accuracy		+/- Timebase Error+/- 1Count		
Low pass Filter		-3dB, 100kHz		
Input Sensitivity		100mVrms		
Time base		10MHz Crystal, 20ppm		
Max. Input Voltage		250Vpp		
General				
Power Requirement		115/230 VAC ±10%, 48 to 66Hz		
Operating Temperature		0 to 50°C (Accuracy specified at 25 ±- 5°C)		
Dimension & Weight		240(W) X 270(D) X 90(H)mm / 2Kg (FG-8102), 3Kg (FG-8105 & FG-8110)		
Standard Accessories		Power Cord, BNC Cable, Fuse, Instruction Manual		