

INTRODUCTION

FG-10000 is a highly stable, multipurpose, broad bandwidth function generator, which can directly generate Sine, Triangle, Square, Ramp, Pulse waveform. It has VCF voltage control frequency and TTL/CMOS synchronized output functions. Frequency counter can display the frequency of internal signal and external input signal up to 30 MHz.

GENERAL SPECIFICATIONS

1. **Frequency Range** : 0.1Hz - 10MHz
2. **Waveform** : Sine, Triangle, Square, Positive & Negative Ramp, Positive & Negative Pulse, TTL / CMOS Pulse. Symmetry of Ramp and Pulse is variable within 90:10 (1Hz~100kHz)
3. **Rising & Falling Edge of Square** : < 50 ns
4. **Sine Waveform**
 - 1) **Distortion** : < 1% (10Hz~10kHz)
 - 2) **Frequency Response** : $\leq \pm 0.5\text{dB}$ (0.1Hz~100kHz);
 $\leq \pm 1\text{dB}$ (2MHz);
 $\leq \pm 3\text{dB}$ (5MHz)
5. **TTL/CMOS Output**
 - 1) Output level of TTL pulse $\geq 3.5\text{V}$
 - 2) Output level of CMOS pulse 5V~14V continuously variable
 - 3) Output TTL low level less than 0.4V in pulse wave and CMOS low level less than 0.5V in pulse wave
 - 4) Rising time : < 100 ns
6. **Output:**
 - 1) Output Amplitude: $\geq 20\text{Vp-p}$ (open circuit),
 $\geq 10\text{Vp-p}$ (with 50 Ω load)
 - 2) Output Attenuator: 0dB, 20dB, 40dB, 60dB
 - 3) DC Offset: $\pm 10\text{V}$ continuously adjustable
7. **Symmetry Range** : 90:10 to 10:90
8. **VCF Input** :
 - 1) Max. Voltage: -5V~0V $\pm 10\%$
 - 2) Max. Control rate: 1000:1
 - 3) Frequency: DC~1kHz
9. **Frequency Counter**
 - 1) Measuring Range: 1Hz-10MHz (Max. 100MHz)
 - 2) Input Impedance: 1M Ω / 20pF
 - 3) Sensitivity: 100mVrms
 - 4) Max Input: 150V AC + DC (with attenuator)
 - 5) Input attenuator: 20dB, 0dB
 - 6) Measuring Error: not more than $3 \times 10^{-4} \pm 1$ digit
10. **Power Supply**
 - 1) Voltage: AC 220V $\pm 10\%$ (110V $\pm 10\%$ Optional)
 - 2) Frequency: 50Hz $\pm 2\text{Hz}$ / 60Hz $\pm 2\text{Hz}$
11. **Operating Ambient:**
 - 1) Temperature: 0 ~ 40°C
 - 2) Humidity: $\leq \text{RH } 90\%$
 - 3) Atmospheric Pressure: 86kPa~104kPa
12. **Dimension (mm)** : 270L \times 255W \times 90H
13. **Weight** : 3kg



*Technical Specifications & Appearance are subject to change without prior notice