

# FG-30 SPECIFICATIONS

## 1. GENERAL SPECIFICATIONS:

Frequency:	0.5Hz ~ 3MHz in 6 steps, controlled by rotary switch.
Output Waveform:	Sine, Square, Triangle, Ramp, Positive Pulse and Negative Pulse; 6 waveforms total.
Stability:	0.1% - 15minutes after power-on. 0.2% - 24hrs after power-on.
DC Offset:	Continuous Adjustment, ?10V at no-load or ?5V at 50 load.
Limits of Operation:	0°C~40°C, 10~80%R.H.
Storage Environment:	-20°C~70°C, 0~90%R.H.
Power source:	AC 115V (±10%)50/60HZ,FUSE:600mA AC 230V (±10%)50/60HZ,FUSE:300mA
Power Consumption:	25W
Dimensions:	27.5 x 9.0 x.30.0 cm
Weight:	2.5Kg Net.
Accessory:	Power cord, manual.

## 2. RAMP WAVE:

Frequency:	0.5Hz - 2.5MHz
Symmetry:	80% (rise wave) to 20% (fall wave), < 5%, 1Hz ~ 100KHz.
Rise Wave Linearity:	< 2%, 1Hz - 100KHz.

## 3. TRIANGLE WAVE:

Frequency:	0.5Hz - 3MHz.
Symmetry:	50% (rise wave) to 50% (fall wave), < 2%, 1Hz ~ 100KHz.
Linearity:	< 1%, 1Hz ~ 100KHz.

## 4. SINE WAVE:

Frequency:	0.5Hz ~ 3MHz.
Distortion:	< 2%, 1Hz ~ 100KHz.
Harmonic Ratio:	< 30dB, 100KHz ~ 3MHz.
Frequency Response:	< 0.1dB up to 100KHz. < 1dB 100KHz to 3MHz.

## 5. SQUARE WAVE:

Frequency:	0.5Hz ~ 3MHz.
Symmetry:	50% (positive half) to 50% (negative half), < 2%, 1Hz ~ 100KHz.
Rise Time:	< 60ns.

## 6. POSITIVE PULSE:

Frequency:	0.5Hz ~ 2.5MHz.
Width:	0.4sec ~ 100ns continuous adjustment.
Symmetry:	20% to 80%, < 5%, 1Hz ~ 100KHz.
Rise Time:	< 60ns.

## 7. NEGATIVE PULSE:

Frequency:	0.5Hz ~ 2.5MHz.
Width:	0.4sec ~ 100ns.
Symmetry:	80% to 20%, < 5%, 1Hz ~ 100KHz.
Fall Time:	< 60ns.

## 8. MAIN OUTPUT:

Output Impedance: 50Ω, < 2% Accuracy.  
Max. output: 20 Vp-p (No load), ±1V  
10 Vp-p (50Ω load), ±0.5V  
Min. output: 0.1Vp-p (No load) and 0.05V (50Ω load)  
Attenuator: one -20dB switch, < 2% Accuracy.

## 9. SYNCHRONOUS OUTPUT:

Output Impedance: 50Ω, < 2% Accuracy.  
Output Level: TTL level, > 3Vp-p fixed amplitude.  
Fanout: > 20.  
Rise Time: < 30ns.

## 10. VCF INPUT:

Input Impedance: 0 ~ 10V.  
Input Frequency: DC ~ 1KHz.  
Input Frequency Variance: 1:1 to 1:1000.

## 11. SWEEP SYNCHRONOUS OUTPUT:

Output Impedance: 1KHz, < 20%.  
Output Waveform: Linear or Log Sweep Ramp Wave.  
Output Amplitude: 10Vp-p (No load) or 5Vp-p (1KΩ load)  
Output Frequency: Continuous adjustment, 0.2Hz ~ 100Hz.

## 12. SWEEP GENERATOR:

Sweep Form: Linear or Log switchable.  
Sweep Speed: 5sec ~ 10ms, continuous adjustment.  
Sweep Width: 1:1 ~ 1:100