

### **FUNCTION GENERATOR**

OMEGATYPE FG-322



This instrument is an accurate testing instrument. It can output the function wave-form such as sine wave, triangle wave, square wave and so on and also frequency and amplitude can be adjusted continuously. It is an ideal equipment for engineers, electric lab, product line and teaching.

#### **FEATURE**

- 01 It is convenient to operate and use with high intelligence for using the single microprocessor to control running and displaying.
- 02 Large scale single integrated accuracy function generator leads to supper performance.
- 03 Designed by large scale integrated circuit to insure high reliability and high stability.

### **TECHNICAL PARAMETER**

01 Output Frequency

## Frequency Range:

- 1.0 0.2Hz ~ 2MHz; seven ranges
- 1.1 0.2Hz 2Hz
- 1.2 2Hz-20Hz
- 1.3 20Hz 200Hz
- 1.4 200Hz 2KHz
- 1.5 2KHz 20KHz
- 1.6 20KHz-200KHz
- 1.7 200KHz-2MHz
- 02 Output Signal Impedance: 50W
- 03 Output Signal Waveform:

Sine, Triangle and Square Wave

04 Output Signal Amplitude

Sine wave

non-attenuate (1Vpp ~ 10Vpp) ± 20% continuously adjustable attenuate 20 dB (0.1Vpp ~ 1.0Vpp) ± 20% continuously adjustable attenuate 40 dB (10mVpp ~ 100mVpp) ± 20% continuously adjustable

## Square wave

: non-attenuate (1Vpp ~ 10Vpp) ± 20% continuously adjustable attenuate 20 dB (0.1Vpp ~ 1.0Vpp) ± 20%continuously adjustable attenuate 40 dB (10mVpp~100mVpp) ± 20% continuously adjustable Triangle wave

: non-attenuate (1Vpp ~ 10Vpp)± 20% continuously adjustable attenuate 20 dB (0.1Vpp ~ 1.0Vpp)± 20% adjust continuously adjustable attenuate 40 dB  $(10 \text{mVpp} \sim 100 \text{mVpp}) \pm 20\%$  continuously adjustable The above are measured with load 50W, The signal amplitude is approx 20V without load.

05 Function Output Duty cycle: 20% - 80%

#### 06 Output Signal Features

- 6.1 Sine wave distortion < 2%
  - 6.2 Triangle wave linear > 99%
  - 6.3 Square wave rise edge time: less then 100nS
  - 6.4 Square wave fall edge times: less than 100nS
  - 6.5 Square wave rise and fall pulse less than or equal to 5% Vo (50W load)
- 6.6 Test Condition: 10KHz frequency output, amplitude 5Vpp, warm-up for 10 minutes.
- 6.7 Power and Consumption: power 110V/220V ± 10%, 50Hz/60Hz ±5%, consumption less than 15W

07 Output Signal Frequency Stability: ± 0.1% min

08 Amplitude Display

8.1 Display digits : 3 digits (decimal point automatic

select place)

8.2 Display units : Vpp or mVpp

8.3 Display errors : Vo ± 20% +1d (Vo refers to the

true value of output signal)

8.4 Resolution : non attenuate 0.1Vpp

> 20dB attenuate: 10mVpp 40dB attenuate: 1mVpp

09 Frequency Display

9.1 Display range: 0.2Hz - 2MHz 9.2 Display effective digit: 4 or 5 digits

10 Measurement Errors: time base error ± trigger error  $(< \pm 0.5\%)$ 

11 Time Base: Frequency: 12MHz

Frequency stability: ±5 x 10-5

12 Working Temperature:  $0^{\circ}$ C ~  $40^{\circ}$ C

13 Size: 270mm x 215mm x 100mm

14 Weight: approx. 1.6 Kg.

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

# **OMEGA ELECTRONICS**