# METRAVI

# **FUNCTION GENERATOR**

FG-2000

## INTRODUCTION

This is an accurate testing instrument. It can output the function wave-form such as sine wave, square wave, rectangle wave, sawtooth wave and triangle wave. And the frequency and amplitude can be adjusted continuously. It is ideal equipment for engineer, electric lab and teaching.

#### **FEATURES**

- It's convenient to operate and use with high intelligence for using the single microprocessor to control, running and displaying.
- Large scale single integrated accuracy function generator leads to super performance.
- Designed by large scale integrated circuit to insure the high reliability and high stability.

### **TECHNICAL SPECIFICATIONS**

#### **Output frequency**

Frequency range: 0.2Hz~2MHz; seven ranges

- 0.2Hz-2Hz
- 2Hz-20Hz
- 20Hz-200Hz
- 200Hz-2kHz
- 2kHz-20kHz
- 20kHz-200kHz
- 200kHz-2MHz
- Output signal impedance: 50Ω
- Output signal wave-form:
  - sine wave, square wave, rectangle wave, sawtooth wave and triangle wave
- Output signal amplitude (peak-peak value):
  non-attenuate (2Vp-p~20Vp-p)±20% continuously
  adjustable, attenuate 20dB (0.2Vp-p~2.0Vp-p)±20%
  continuously adjustable, attenuate 40dB (20mVp-p~200mVp-p)±20% continuously adjustable

The above are measured with load 1M $\Omega$ , the output signal amplitude will be half of standard at 50 $\Omega$  load.

- Function output symmetry adjust scope: 20%~80% (±10%)
- Output signal features:
  - sine wave distortion:<2%</li>
  - triangle wave linear:>99% (10%-90% of output amplitude)
  - square wave rise edge times: less than 100nS (10%-90% of output amplitude)
  - square wave fall edge times: less than 100nS (10%-90% of output amplitude)
  - square wave rise and fall pulse less than or equal to 5%Vo (50Ω load).
  - Test condition: frequency output: 10KHz, amplitude: 5Vp-,warm-up for 20minutes.



- Output signal frequency stability: less than ±0.1%/min (test condition is the same as the above)
- Amplitude display (only for 50Ω load, at 1MΩ load, the real output amplitude is double of the displaying value):

a) Display digits: 2/3 digits (decimal point

automatic select place).

b) Display units: Vp-p or mVp-p.

c) Display errors: Vo±10%±1d (Vo refers to the

true value of output signal)

d) Resolution: Non-attenuate: 0.2Vp-p

20dB Attenuate: 20mVp-p 40dB Attenuate: 2mVp-p

Frequency display:

a) display range: 0.2Hz-2MHzb) display effective digit: four or five digits.

Measurement errors:

≤ 0.5%

Time base frequency:

12MHz frequency ± 5x10<sup>-5</sup>

stability:

± 0/10

Working temperature:

0°C~40°C

Size:

0 0 10 0

Weight:

270mm x 215mm x 100mm approx.1.6kg.

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

## THE QUALITY LEADER

www.metravi.com