

INTRODUCTION

This instrument is a 10Hz to 2700MHz multiple-function & equal accuracy counter. It features a eight digit, bright seven segment LED display, four function performance, LOW power consumption circuit design, small size Light weight, high stabilized crystal oven oscillator for measurement of accuracy and full input signal conditioning.

The four functions are frequency, period, totalizer and Self check

This is accomplished by a single chip microcontroller. The input signal can be conditioned by attenuation.

SPECIFICATION

The pertinent specification are listed as follows

Frequency measurements

CHANNEL - A

Range : 10Hz to 10MHz direct counter
 10MHz to 100MHz perscaled by proportion

Resolution : Direct counter : 1, 10, 100Hz switch selectable
 : Per scaled : 10, 100, 1000Hz switch selectable

Gate time : 0.01s, 0.1s is switch selectable

Accuracy : ± 1 count ± time base error x measured

CHANNEL - B

Model Number Ltem	FC-2700
Range	100MHz - 2.7GHz
Resolution	100Hz, 1KHz, 10KHz
Gate Time	0.01s, 0.1s, 1s
Accuracy	± 1 count ± time base error x measured frequency

Period Measurements

Input : Channel A

Range : 10Hz to 10MHz

Resolution : 10⁻⁷ s, 10⁻⁸ s, 10⁻⁹ s, switch selectable

Accuracy : ± 1 count ± time base error x measured preiod

Totalize measurements

Input : Channel B

Range : 10Hz to 10MHz

Resolution : ± 1C count of Input

Check : 8 Bits Repeating Display 0-9 Together

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

Input Characteristics

CHANNEL - A

Input Sensitivity

- : 10 Mhz range : 10Hz ~ 8MHz 20m Vrms
- : 8MHz ~ 10MHz 30m Vrms
- : 100 Mhz Range : 10Hz ~ 8MHz 20m Vrms
- : 8MHz ~ 10MHz 30m Vrms

Attenuation : x 1, x 20fixed

Filter (CHA only) Low pass : Ac 100KHz - 3dB

Impedance : Approx, 1M Ohmless then 35pF

Maximum voltage without damage : 250v (DC + Acrms)

CHANNEL - B

Input Sensitivity : 20m Vrms

Impedance : Approx. 5 Ohmless

Maximum voltage without damage : 3V

Time Base

- Time Base Frequency** : 110MHz
- Short Term Stability** : $\pm 3 \times 10^{-9}$ for 1s Average
- Long Term Stability** : 2×10^{-5} month
- Temperature** : $\pm 1 \times 10^{-5}$ 0°C to 40°C
- Line Voltage** : $\pm 1 \times 10^{-7}$ for 10% change

General

Display : 8 digit, 0.39 inch red led display with decimal point, gate, overflow, Khz, Mhz and $\pm \mu S$ indication

Power requirement : Line 220V $\pm 10\%$ 45hz ~ 70hz

Warm-up Time : 20 minutes when cold started at 25°C

Temperature : Rated range of use : -5°C ~ + 50°C
storage and transport : -40°C ~ + 60°C

Humidity : Operating : 10 ~ 90 % RH

: Storage : 5 ~ 95%RH

Dimension and weight : width : 207 mm

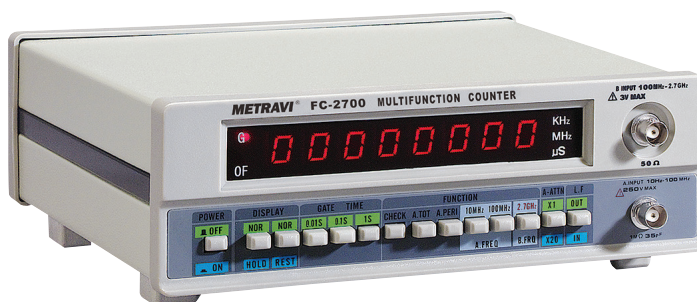
: heigh : 85 mm

: depth : 255 mm

: weight : 2 kg

Accessories : Power cord

Operating Manual



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