

Function Generator ME4510

This unit combines a 0.2Hz, 2MHz function generator and independent 6 digit frequency counter with a frequency range from 1.0Hz to 15MHz. The counter will display the output frequency of the generator or can be switched to work as an independent frequency counter. The function generator provides sine, square, triangular, pulse, ramp and 50Hz sine outputs. It is easy to use and ideal for use in education, electronic production and research and development.

Includes the Function Generator, connect cable, operation manual, fuse and power cord.



Main output

Output frequency	0.2Hz - 2MHz
Frequency step	six-step, decimalism
Frequency adjustment ratio	Rate: 0.1 - 1 Range: 0.2 - 2
Output waves	Sine, square, triangle, pulse, ramp, 50Hz sine
Output impedance	50Ω ± 10%
Output signal type	single, VCF
VCF	0 - 5V, VCF ≥ 100:1
External FM voltage	0 - 3Vp-p
Output amplitude	20Vp-p (1MΩ), 10Vp-p (50Ω)
Output protection	short circuit, resist input voltage: ±35V (1M)
Distortion of sine waves	≤100k 2% >100k 30dB
Frequency response	≤100kHz ±0.5dB >100kHz ±1dB
Linearity of triangle wave	≤100kHz: 98% >100kHz: 95%
Duty adjustment	20% - 80%
DC offset	±10V (1MΩ), ±5V (50Ω)
Rising time of square wave	100ns 5Vp-p 1MHz
Attenuation accuracy	≤±3%
Effect of duty on frequency	±10%
50Hz sine output	About 2Vp-p

Environmental conditions

Working temperature	0 - 40 °C
Storage temperature	-40 - 60 °C
Max. working humidity	90% (40 °C)
Max. storage humidity	90% (50 °C)

Frequency counter

Measurement accuracy	6 digits ±1% 1 word
Resolution	0.1Hz
Gate time	10s (≤8kHz) 1s (8kHz to 200kHz) 0.1s (200kHz to 15MHz)
External measurement frequency range	1 Hz - 16MHz
External measurement frequency sensitivity	200mV
Range of counter	6 digits (999999)

TTL/CMOS out

Output amplitude	"0": ≤0.6V; "1": ≥2.8V
Output impedance	600Ω
Output protection	Short circuit, resist input voltage: ±35V (1M)

Power

Voltage	220±10%V / 110±10%V (Switchable)
Frequency	50±2Hz / 60±2Hz
Visual power	10VA approx.
Fuse	0.5A

Physical Characteristics

Weight	Approx. 3kg
Dimensions	225(W) x 105(H) x 285(D) (mm)