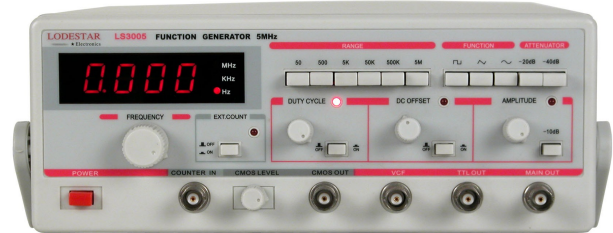


These models are feature-packed, easy-to-use function generators. Sine, square, triangle, pulse, and ramp waveforms from 2 Hz to 2 MHz (LS3002) or 5 Hz to 5 MHz (LS3005) are available. The four-digit counter display shows frequency with much better resolution than a dial.



Features

- Easy to use -- controls are self-explanatory.
- Sine, square, triangle, pulse and ramp output.
- DC Offset Control
Continuously variable DC offset allows the output to be injected directly into circuits at the correct bias level.
- Duty Cycle Control
Converts the instrument to a pulse generator capable of generating rectangular waves or pulses, ramp or sawtooth waves, and slewed sine waves.
- Separate outputs for TTL and CMOS signals.
The CMOS signal has an adjustable amplitude (4 to 14.5 V) to fit the circuit you're working with.
- Inject an external ramp generator into the VCF input to turn the function generator into a sweep generator.

Specifications

Sine wave	Distortion	≤ 2% at 1kHz
	Flatness	LS3002: ≤ 1dB LS3005: < 0.3dB for 5Hz to 500kHz, ≤ 1dB 500 kHz – 5MHz
Square wave	Symmetry	≤ ± 3%, 2Hz to 100 kHz
	Rise time	≤ 50 ns
Triangle wave	Linearity	98%, at 1 kHz
TTL Output	Level	≥ 3Vp-p (without any load)
	Rise time	≤ 30 ns
CMOS Output	Max Frequency	2 MHz (LS3002), 5MHz (LS3005)
	Level	4Vpp ± 0.5Vpp to 14.5Vpp ± 0.5Vpp continuously variable
	Rise time	≤ 120 ns

Frequency Characteristics	Waveforms	Sine, Square, Triangle, Pulse, Ramp
	Range	2 Hz to 2 MHz (LS3002), 5 Hz to 5 MHz (LS3005) 6 ranges for each model
	Resolution	4 digits
	Variable Duty Cycle	20% - 80% continuously variable
	Operating Modes	Normal, VCF (Voltage Controlled Frequency)
	Frequency Stability	≤ ± 1%

VCF	Input Voltage	-10 V to +10 V. Within this range, frequency change ≥ 100:1
	Input Impedance	1 kΩ ± 10%

Frequency Counter	Accuracy	Timebase accuracy ± 1 count
	Range	2Hz to 20MHz
	Timebase accuracy	± 20 ppm (23 °C ± 5 °C)
	sensitivity	≤ 10MHz:600mVp-p ≥ 10MHz: 1.4 Vp-p
	Display	4 digits

Output Characteristics	Impedance	50 Ω ± 10%
	Level	20 Vp-p Open circuit, 10 Vp-p into 50 Ω
	Amplitude control	Variable
	Attenuation	Variable, 20 dB range typical. Attenuators: adjustable in 10 dB ± 1 dB steps, range -10 dB to -70 dB
	DC Offset	Variable: ± 10 V open circuit, ± 5 V into 50 Ω

Power Requirements	AC 110 V/220 V ±10% selectable, 50/60 Hz, 20 W
Accessories included	AC Line Cord Instruction manual Spare fuse Output cable, BNC to alligator clips
Dimensions (W x H x D):	240 x 90 x 280 mm 9.45 x 3.54 x 11.02 inches
Weight:	2.5 kg (5.6 pounds)

Specifications subject to change without notice.