

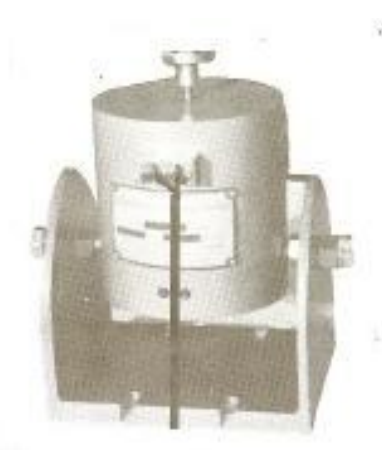
**IEICOS
VIBRATION GENERATORS &
POWER AMPLIFIER
OSCILLATORS**

**IEICOS ELECTRODYNAMIC VIBRATION GENERATORS
MODEL 320 Series**

IEICOS offers Electrodynamic Vibration Generators in 3 standard models with peak force output of 2 kg, 5 kg and 10 kg. IEICOS Vibration Generator with peak forces up to 100 kg in different ranges can also be provided on request.

IEICOS Electrodynamic Vibration Generators are used to generate vibration with varying amplitude and frequency for endurance and operational testing of products, structural and fatigue studies and/or to calibrate the vibration sensors. IEICOS Vibration Generators is rotatable through $\pm 90^\circ$.

The vibration generator comprises a cylindrical magnet and a moving core with a spindle on to which a platform can be attached for mounting the specimen to be tested. The drive coil of moving spindle is situated in the radial magnetic field and is fixed to a suspension system made of laminates flexures. This suspension system effectively restrains transverse motion of the moving element. Total moving element weight is kept very low to achieve a high performance ratio. As there are no moving or rolling parts to wear out or critical adjustments to make, the reliability is very high.



Specifications

Model	320	321	322
Force Output in kg	2	5	10
Frequency Range	2 Hz to 1,250 Hz	2 Hz to 1,250 Hz	2 Hz to 1,250 Hz
Drive Power in watts (Nominal)	30	60	120
Total permission stroke (peak to peak) Interior in mm	4	4	4
D.C Resistance of Moving Coil in Ohms	10	8	8
Driving Spindle (Internal Thread)	M6	M8	M8
Weight kgs (Nominal)	5	10	20
Overall Dimensions in mm (Nominal)	150 × 120 × 120	300 × 170 × 170	300 × 170 × 170

POWER OSCILLATORS TO DRIVE VIBRATION GENERATORS

IEICOS OSCILLATOR POWER AMPLIFIER

MODEL 370 Series

IEICOS Oscillator Power Amplifier instrument is designed for driving IEICOS vibration generators.

Built-in Oscillator provides sinusoidal waveform from 1 Hz to 3,000Hz in four ranges to the power amplifier and thereon to drive the generator. Latest state-of-the-art technology of integrated circuitry has been incorporated in the oscillator and by using feedback circuitry stabilization of both amplitude and frequency is achieved to maximum extent.

The Power Amplifier is designed for reliable, wide band performance and high fidelity operation. Reduced distortion and noise and a wider flat frequency response are the major benefits of solid state design. The amplifier is conservatively rated and has sufficient power to drive the vibration generator to maximum displacement, velocity capability. Over-voltage protection is incorporated in the driver output stage with a resettable switch and the fault condition is indicated by a light.



Specifications:

OSCILLATOR

Waveform	:	Sinusoidal
Frequency	:	1 Hz to 10,000 Hz in four ranges
Accuracy of dial	:	$\pm 2\%$ of the 0.2 %
Distortion	:	Less than 0.2%
Output	:	up to 3 Volts RMS

POWER AMPLIFIER

Model	370	371	372
Maximum power output Watts	30	60	120
Frequency Range in Hz	1 to 3,000	1 to 3,000	1 to 3,000
Load Impedence in Ohms	8	8	8
Input voltage for maximum power in mV derived from built-in Oscillator or External Source:	50	100	250
i) At no Load			
ii) At Full Load	75	150	300
Power Supply	230 Volts 50 Hz	230 Volts 50 Hz	230 Volts 50 Hz
Dimensions (in mm)	150 × 450 × 325	150 × 450 × 325	150 × 450 × 325

Mechanical dimensions, location of components, specifications may be changed without notice to incorporate state-of-the-art technology and continuous improvement.

INDUSTRIAL ENGINEERING INSTRUMENTS

Manufacturers of Techno Electronic Aids Devices, Instruments and Systems,

203, 12th Main Road, 3rd Phase, Peenya Industrial Area,

Peenya, Bangalore-560 058. Karnataka, India.

Phone: 080 28394520 Fax: 080 28371386

Email: info@ieicos.com Web Site: www.ieicos.com