

## Vibration Test System

Highly stable and safe thanks to anti-vibration supports

Minimization of applied forces and camouflaged noise due to silent-block mounted platforms.

Simulation of the product real working and transportation conditions

Improved design granting excellent level of comfort for the operator



## PRODUCT DESCRIPTION

Controlar Vibration Test System is a highly stable and silent test system with vibration to be used in production lines or in laboratories under a controlled environment. This system can determine the extent to which the DUT can withstand mechanical vibrations and fatigue damage that could be encountered in handling and transportation, among others. Moreover, it can be adapted to other tests such as functional tests which require vibration loads.

## KEY FEATURES

Low-resistance silent-blocks capable of absorbing the residual energy resulting from vibration, thereby reducing the amount transferred to the machine frame

Control of the vibrator motor carried out by a frequency inverter

Sensors and software-controlled components to automate the test sequence

Safety light curtain sensors and calculated distance between the top plate and the base to minimize the risk of injury.

## PRODUCT CONFIGURATION

The machine structure has been designed to hold and absorb the vibrations during the test which could be transmitted to the most sensitive devices in the system. For this purpose, anti-vibration feet were applied.

The structure's weight is dimensioned to sustain the major forces generated during the test. In order to achieve this, the platform under vibration was reinforced with a 142 kg platform, contributing to the machine stability.

The principle of operation is based on the simulation of normalized vibrations that might affect the components of the final product under controlled conditions.

The test may be performed under a fixed frequency sinusoidal vibration or under a sweep of frequencies.

## MAIN APPLICATIONS

This system is specially suited for test applications in the automotive industry, which require the DUT – such as clusters, auto radios, bezels and smaller components like buttons, knobs, etc. – to be under simulated environments of vibration loads.

## TECH SPECS

### Dimensions (in mm)

810 (W) x 1150 (L) x 2100 (H) mm

### Power

/ Voltage: 230VAC

/ Frequency: 50Hz

/ Current: 20A

### Communication protocol

/ Host-link protocol (PC-PLC)

/ LXI protocol (PC-Multimeter-Power supply)

/ Proprietary protocol (PC-VPC interface)

### Vibration magnitude

DC/AC voltage, DC/AC current, frequency, power factor, power level, resistance, capacity, temperature, among others

### Autodiagnosis (new)

DUT emulator for machine compliance validation

### Silent-blocks capacity

20 kg each

### Technical support

Prepared for remote assistance with augmented reality



**Controlar**  
innovating industry

+351 225 898 410  
info@pt.controlar.com  
www.controlar.com  
—

**Controlar S.A.**  
Rua do Caulino, 314  
4445-259 Alfena  
Portugal



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