CSI Concept Scientific Instruments

Acoustic Enclosure

with Integrated Mechanical anti-vibration system

Specially dedicacted for Nano-Observer AFM

- Easy access
- Compact
- Sound-damping
- Temperature Stability
- Integrated vibration isolation
- Dedicated for SPM

Overview

This acoustic enclosure is specially designed for Nano-Observer microscope to improve performance of AFM equipment.

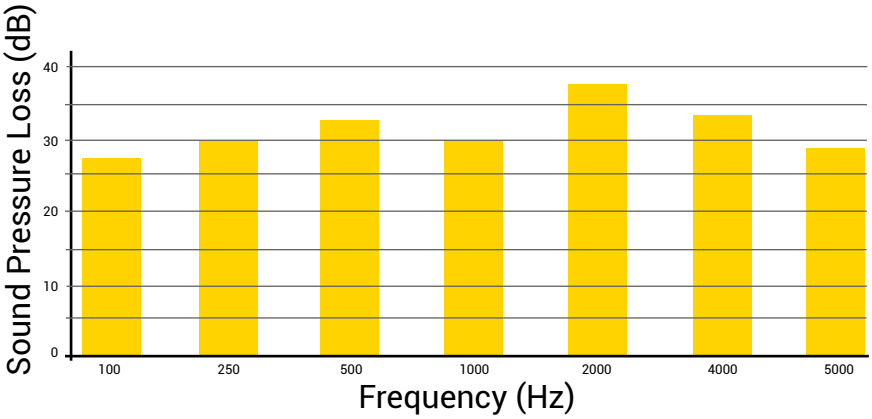
The layer sound dumping ensures frequency noise isolation.

The compact form saves valuable space within the lab and permits an ease of access and maneuverability. The system propose san integrated mechanical anti-vibration capability

> Specially design for Nano-Observer AFM Microscope

Acoustic Isolation Performance

Sound Pressure Loss = dB without enclosure - dB with enclosure



Performance Details

- *27 dB of sound loss at 100 Hz*
- *32 dB of sound loss at 500 Hz*
- *30 dB of sound loss at 1,000 Hz*
- *37 dB of sound loss at 2,000 Hz*
- *29 dB of sound loss at 5,000 Hz*

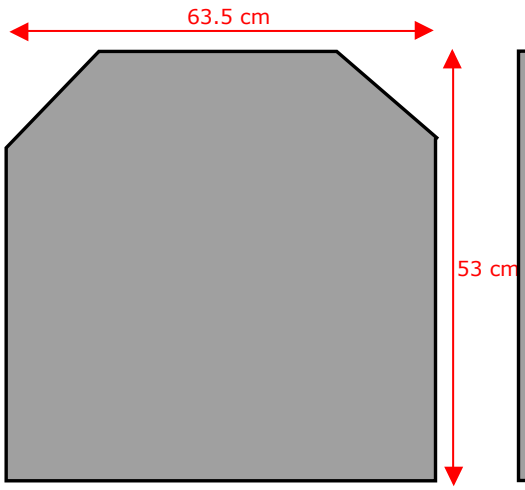
Mechanical Isolation Performance

The antivibration system is based on an isolated platform suspended via four bungee type cords constituting a harmonic oscillator (isolates from vertical vibrational components) and a pendulum (isolates from horizontal vibrational components) both with resonance freq. < 1 Hz (typically).

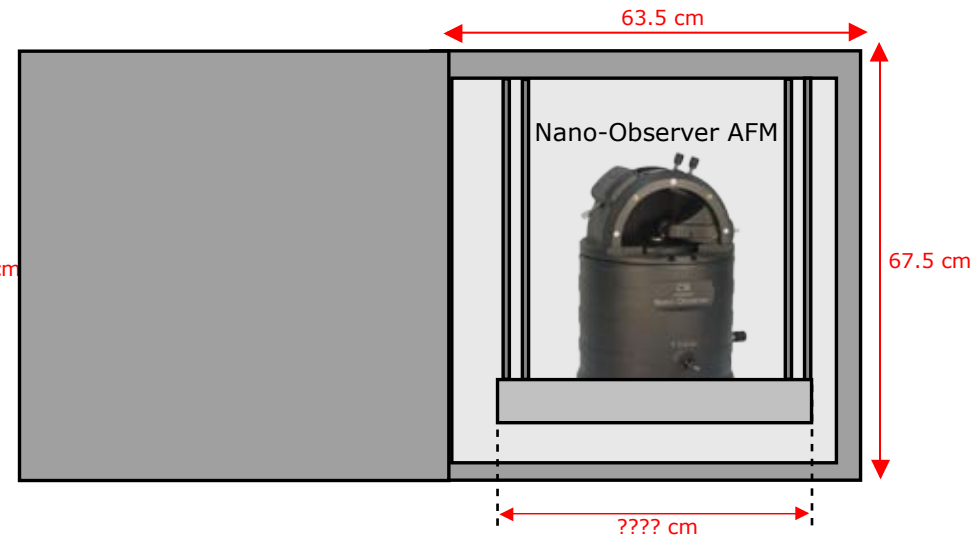
Vibration isolation:
Isolation from noise > 1Hz in both horizontal & vertical (AFMs require isolation from high frequency floor noise)

Dimensions

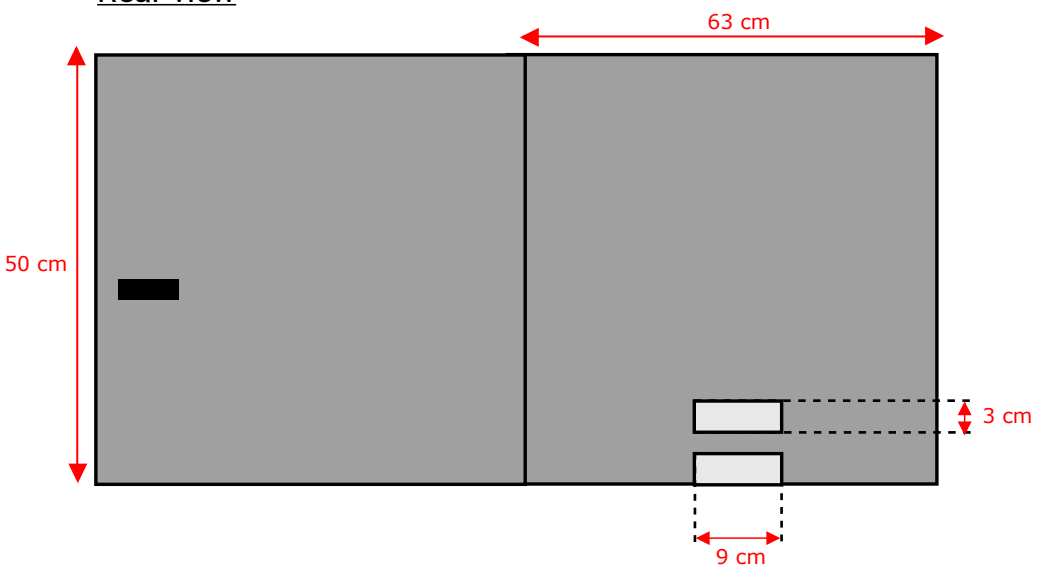
Top view



Front view



Rear view



CSI Concept Scientific Instruments

CSInstruments is a French scientific equipment manufacturer specialized in the conception of Atomic Force Microscopes and options designed for existing AFM. The company was founded by a team of experts working in the AFM field for more than 20 years, starting as pioneer with some historical manufacturers. Taking the best of this experience to create the Nano-Observer, a high quality research AFM giving life to an affordable solution for any research laboratory or industry...