

ACCURION

solutions for science

active vibration isolation desktop unit
halcyonics_nano series



Active Vibration Isolation Desktop Unit

halcyonics_nano series

ABSTRACT

The ultra-compact, portable and easy to use Nano Series, introduced in 2008, is the world's smallest active vibration isolation system. It is the perfect solution for entry-level AFMs and other small and lightweight instruments. The powerful new designed actuators with its Neodymium magnets and the external controller make the halcyonics_nano Series a small but versatile component of your instrument setup.



Nanosurf Mobile S on Nano_20



Nano_20 with Veeco Caliber AFM

BENEFITS

- Supreme performance even under severe environmental conditions
- Active isolation with the halcyonics_nano starts from 1.0 Hz and is active until 200 Hz (and passive above 200 Hz)
- ideal to dampen building vibrations
- Reliable systems: after passing a specific quality control procedure
- Two year guarantee.
- Qualified service: for standard and customized solutions factory trained personnel will support you in finding the optimal solution for your specific measurement task
- Low voltage electromagnetic actuator avoid high voltage used for many Piezo systems = no interference with your delicate instrumentation
- Off-the-Shelf availability and rapid delivery allow you to start your work right away and shorten the time to publish your results
- Service hubs in Europe, US and Asia for fast support

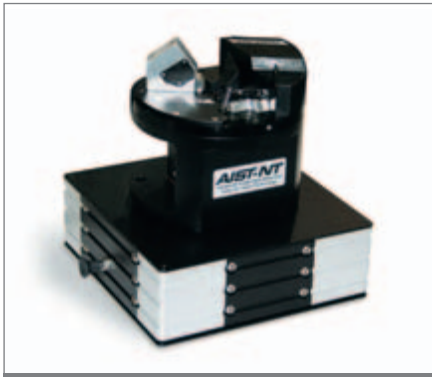
FEATURES

- Ultra-compact design
- Lightweight and portable
- Fast and easy setup
- Isolation starts at 1.0 Hz - effectively isolating environmental vibrations
- Separate controller - no heat dissipation interferes with the experiment
- Active Control eliminates resonance amplifications
- settling time only 0.3 s

APPLICATIONS

Applications for the Nano Active Vibration Isolation desktop units include:

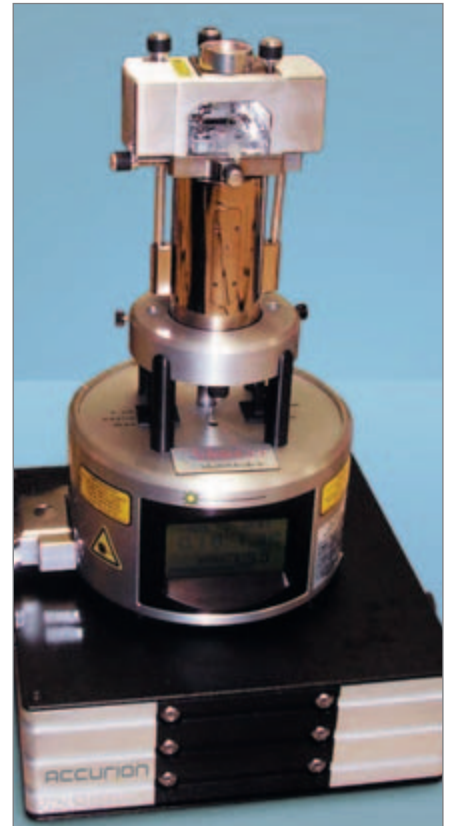
- Atomic Force Microscopy (AFM, SPM)
- Automated optical Microscopy with CCD Head
- Ultra-precise Scales
- ... and many more



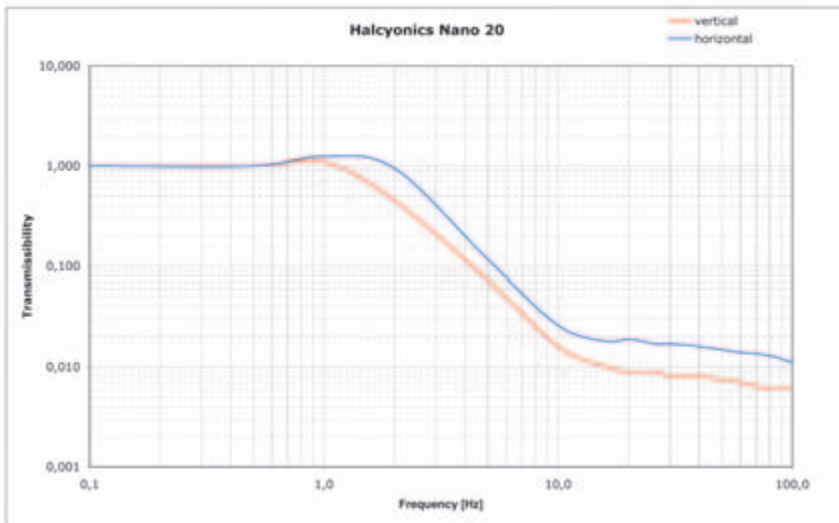
Nano_20 supporting AIST_NT AFM



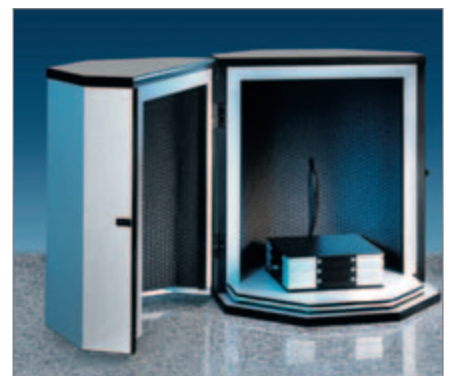
Nano_30 - for loads up to 25 kg (55 lbs)



Nano_20 with Veeco Multimode AFM



Transmission graph of the Nano_20: no resonance below 5 Hz, isolation > 15 Hz better than 40 dB (99.0 %) Measured at a velocity of 100 $\mu\text{m/s}$ with a payload of 8 kg | 17.6 lbs



Nano_20 with the AE_200

OPTIONS/RECOMMENDED ACCESSORIES

- Acoustic Enclosure
- Customer specific top plate
- Support frame

