



AVI-600

Active Vibration Isolation

The Perfect Solution for Supporting Nanotechnology's Largest Instruments



FEATURES

- Active Isolation from 1 Hz to 200 Hz
- Passive Isolation beyond 200 Hz
- 5-20 milli second response
- Easy to install, simple to use
- Designed for years of continuous, trouble-free use
- Controller with diagnostic LED display

BENEFITS OF ACTIVE ISOLATION

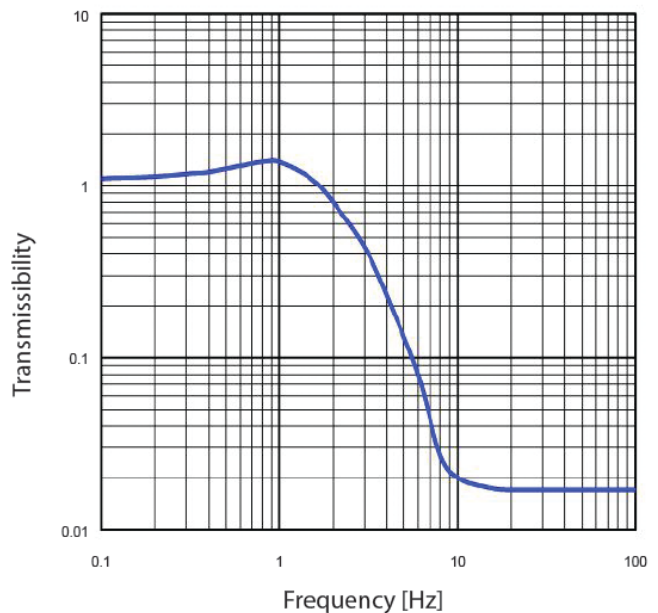
Active Isolation systems sense input vibrations and dynamically damp them out.

- Isolates in all 6 degrees of freedom
- Internal feedback loop damps all mechanical resonances
- Provides excellent vibration isolation at low frequencies
- No low frequency resonance and no air required

APPLICATIONS include

- SEM and TEM
- UHV-SPM
- Lithography
- Tunnel Microscopes
- Fabry-Perot Interferometers
- Large-Scale Instruments Sensitive to Vibrations

TRANSMISSIBILITY



AVI-600

Active Vibration Isolation

The AVI-600 is a compact active vibration isolation system. It is ideal for retrofitting or integrating into existing set-ups that requires low frequency vibration isolation. The AVI-600 is available in a range of sizes and additional modules can be used to support even the largest loads.



AVI System Supporting Carl Zeiss Sigma VP SEM

MODEL	MODULE DIMENSIONS	LOAD CAPACITY (PER MODULE)
AVI – 600	W 11.3" x D 28.4" x H 4.5"	450 Kg / 990 Lbs
AVI – 600 Extra	W 11.3" x D 28.4" x H 4.5"	510 Kg / 1122 Lbs
AVI – 600 Plus	W 11.3" x D 28.4" x H 4.5"	570 Kg / 1254 Lbs
AVI – 600 Ultra	W 11.3" x D 28.4" x H 4.5"	630 Kg / 1386 Lbs

TECHNICAL SPECIFICATIONS

Isolation Range	Active: 1 - 200 Hz; Passive: >200 Hz
Transmissibility	Above 10 Hz transmissibility < 0.017 (-35 dB)
Module Size	W 11.3" x D 28.4" x H 4.5"
Module Weight	60 KG / 132 Lbs
Static Compliance (per module)	
Vertical	Approx. 12 μ m / N
Horizontal	Approx. 6 μ m / N
System Noise	less than 50nG/ \sqrt Hz
Power Consumption	27 W typical
Input Voltage	90-125VAC / 200-250VAC, 50-60Hz
Controller Dimensions	48 x 13 x 25 cm / 19 x 5.1 x 9.8"
Performance Monitoring	A multiplexed signal for display on oscilloscope shows sensor parts with and without isolation.

