

LabX – June 2024

New Ultra-Thin, Low-Height Model CT-10 Passive Isolator

The new passive Negative-Stiffness tabletop vibration isolation platform provides the industry's thinnest low-height, low-frequency isolator for Microscopy

The new ultra-thin, low-height CT-10 passive isolator from Minus K Technology, at just over 12.5 inches square and 2.7 inches in height, offers advanced low-frequency vibration isolation performance. Compared to larger models like the CT-2, the CT-10 delivers exceptional 1/2 Hz vertical and ~1-1/2 Hz horizontal natural frequencies, outperforming traditional air tables and active systems. This innovation, which earned a 2019 Laser Focus World Innovation Award, utilizes Minus K's patented Negative-Stiffness technology, requiring no electricity, compressed air, or maintenance.

Erik Runge, VP of Engineering, highlights the demand for smaller, high-performance isolators, stating, "The CT-10 provides the most compact 0.5 Hz isolator we have ever produced." Ideal for small microscopes and AFM applications, the CT-10's passive mechanical design ensures high isolation efficiency—approximately 93% at 2 Hz, 99% at 5 Hz, and 99.7% at 10 Hz.



With emerging technologies requiring precise vibration isolation in a compact

form, the CT-10 meets these needs, offering superior performance in a smaller footprint. Its portability and flexibility make it an ideal choice for micro and nanotechnology microscopy applications, setting a new standard in vibration isolation.