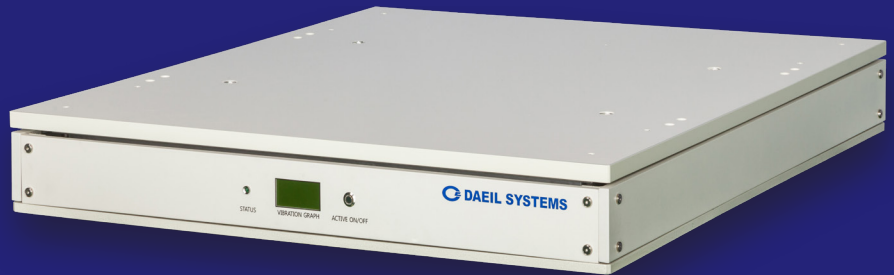




Daeil Systems DVIA-UB Series



Active Vibration Isolation for Conventional SEM, TEM & FIB

The DVIA-UB Series is a cost-effective, low-profile platform with an integrated controller. VEC customizes the platform and selects the isolators to match the mass and footprint of the microscope (up to 1000 kg).

Every DVIA-UB includes a 10-year limited warranty

Active Isolation Technology

The DVIA-UB series incorporates sensors and actuators within the feedback and feedforward control systems to reduce vibration in 1–10 Hz range, with fast settling time.

Low Profile

Daeil Systems integrates both the isolators and the controller into the base to create a more streamlined design. With a height of only 96 mm (2.78 in), DVIA-UB is an excellent choice for microscopes in enclosures or at facilities with height constraints.

No Compressed Air Required

The DVIA-UB Series does not require air supplies for the system to operate. Metal springs in the isolator units support heavy payloads and provide outstanding passive vibration isolation for high-frequency vibrations.

Integrated Controller

The feedback controls of the isolator in the base mean that no external controller is required.

High-quality Sensors with a Digital Controller

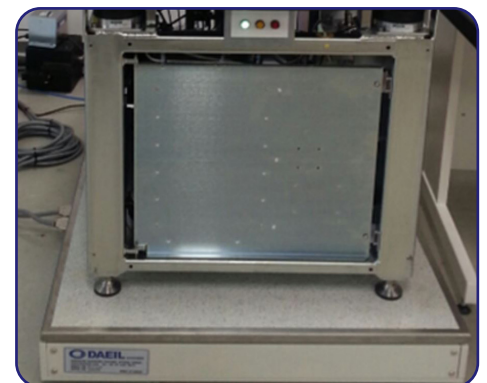
Unlike competing low-cost solutions, DVIA-UB systems employ 12 velocity sensors and a digital controller that uses feedforward algorithms to enable better vibration isolation performance at lower frequencies. The use of feedforward algorithms is not possible with analog systems.

DVIA-UB Platform

Conventional High Resolution Imaging and Analytical Instruments (<700 kg)

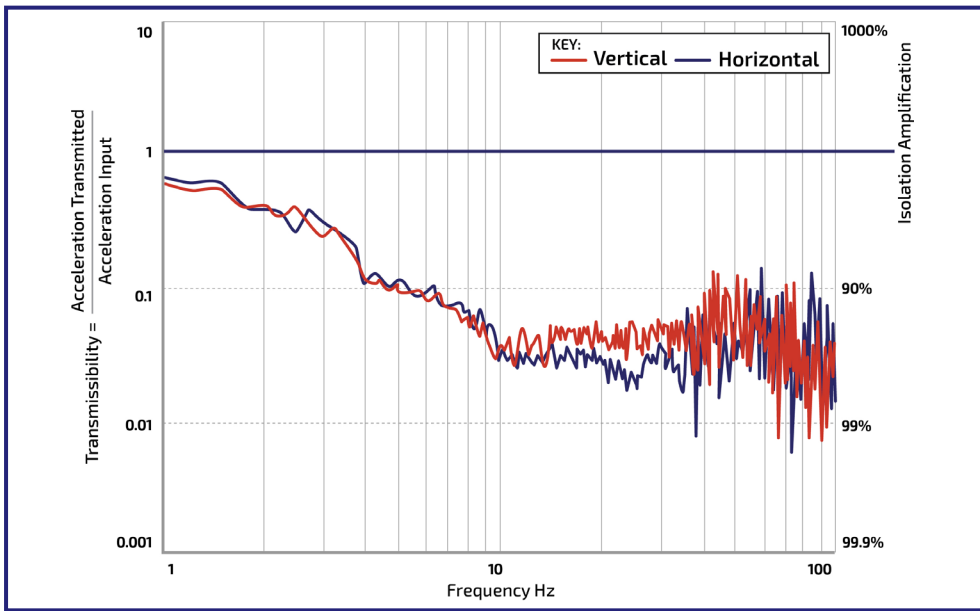
- Scanning Electron Microscopes (SEM)
- Focused Ion Beam Microscopes (FIB & FIB/SEM)
- Analytical Instruments

10-Year Limited Warranty



Daeil Systems DVIA-UB Series

Active Vibration Isolation

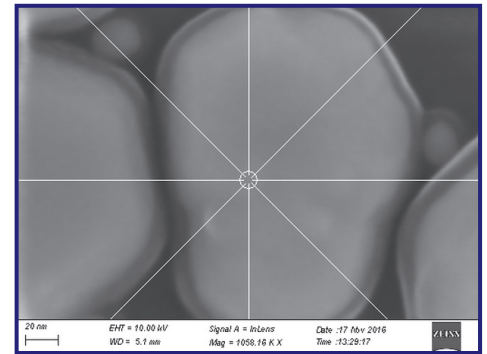
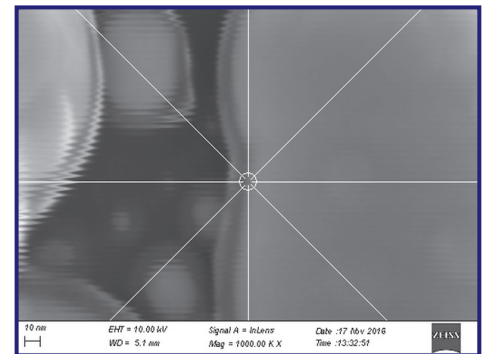


The DVIA-UB performs well at low-frequencies

Specifications

Model No.		Modular Platform		Desk Platform	Base Platform
		DVIA-U350	DVIA-U700	DVIA-UD350	DVIA-UB700
Dimensions (W x D x H)	Isolator Unit	783 x 205 x 96 mm	818 x 220 x 96 mm	783 x 205 x 96 mm	818 x 220 x 96 mm
	Platform	n/a		Custom / made	
Maximum Load Capacity		150 - 350 kg	350 - 700 kg	150 - 350 kg	350 - 700 kg
Actuator		Electromagnetic Actuator			
Maximum Actuator Force		Vertical : 6 N Horizontal : 3 N	Vertical : 12 N Horizontal : 6 N	Vertical : 6 N Horizontal : 3 N	Vertical : 12 N Horizontal : 6 N
Active Isolation Range		0.5 - 100 Hz			
Degrees of Freedom		6 degrees			
Vibration Isolation Performance		≥90% at 4 Hz / 97% at 10 Hz			
Settling Time		≤0.3 sec*			
Input Voltage (V)		AC 80 - 260 V / 50 - 60 Hz			
Power Consumption (W)		Maximum 65 W <20 W in normal	Maximum 195 W <60 W in normal	Maximum 65 W <20 W in normal	Maximum 195 W <60 W in normal
Operating Range	Temperature (°C)	5 - 50 °C			
	Humidity (%)	20 - 90%			

*0.3 sec settling time is measured after 90% reduction of input. (The settling time varies with several conditions, such as payload, force, natural frequency, etc.)



Top image shows imaging performance before installing the DVIA-UB platform; bottom image shows after platform installation.

All Daeil systems are TUV and CE certified. Daeil and VEC provide a 10-year limited warranty on all DVIA-UB products.

Daeil Vibration Isolation systems are TUV Certified

Daeil Active Vibration Isolation Systems are CE Certified



**VIBRATION
ENGINEERING
CONSULTANTS**

1441 Rollins Road
Burlingame, CA 94010
+1 831-465-9189
info5@vibeng.com
www.vibeng.com

DAEIL SYSTEMS



© 02-2020 Vibration Engineering Consultants.
Specifications subject to change without notice.