

Vision IsoStation™ Plus Optical Workstation



The Vision IsoStation Plus optical workstation provides industry leading performance and more user friendly features and accessories than any other vibration isolation workstation. All of the features and accessories have been designed specifically to improve ergonomics, ease-of-installation, set-up and lab space utilization.

Top Performance

The Vision IsoStation Plus workstations are offered with platform sizes from 30"x30" up to 36"x72" to accommodate the widest range of applications from small bioinstrumentation isolation up to medium size optical investigations that may have previously needed a full-sized optical table. The workstation is equipped with high-performance self-centered long stroke I-325LS Series pneumatic isolators that feature 1,300 lb gross load capacity and reduce transmitted vertical and horizontal vibrations by 85% or more after 5Hz and by more than 95% after 10Hz.

Easy to Use

The Vision IsoStation Plus workstation is completely pre-assembled and includes integrated frame leveling feet with casters, a pre-installed optical breadboard, corner brackets, leveling valves, and air regulator standard on all models. It is shipped in a special shipping package that not only reduces packaging materials but also allows users to simply roll their system off into their lab. The workstation's unique corner brackets act as a docking surface, an accessory mount, and a seismic restraint to keep the breadboard atop the frame. The brackets also feature integrated frame bubble levels and float height indicators to make set-up and installation easier than ever.



Ergonomic

Vision IsoStation Plus workstation also features an ergonomically designed front brace that provides enough legroom for seated users allowing more comfortable examinations, operations, and experiments.

A Variety of Accessories

The Vision IsoStation Plus series offers a variety of accessories designed specifically for modern scientific and biological investigations. This includes several new instrumentation and accessory storage options.

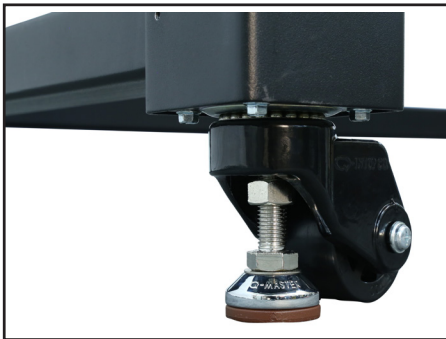
Highlighted Features



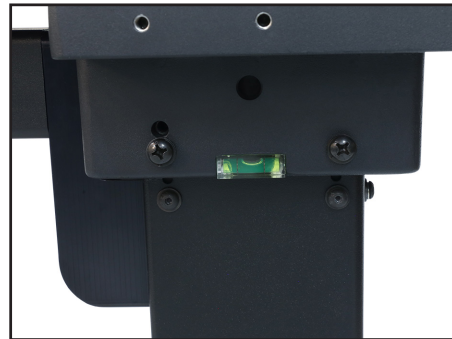
The roll-off packaging simplifies table rigging



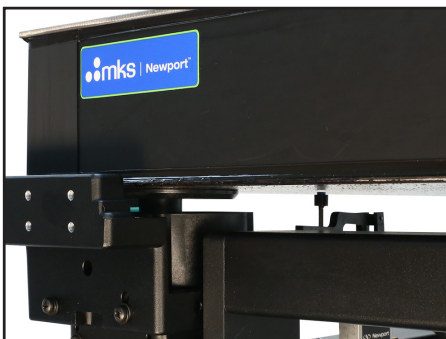
Pre-installed leveling valve and air regulator



Leveling feet and casters standard on all models



Integrated bubble indicator to pre-level the system before floating



Isolator with long stroke allows more height tolerance for floating

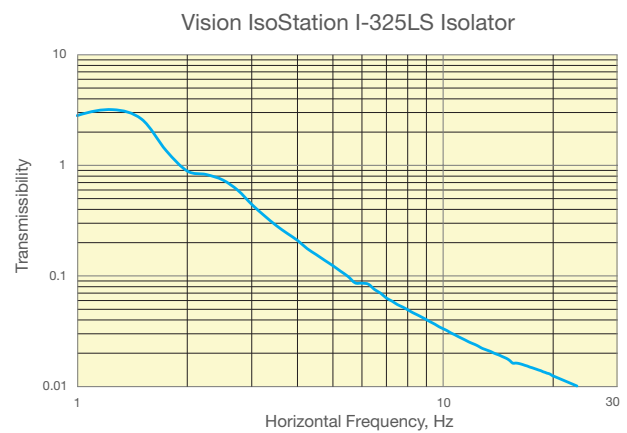
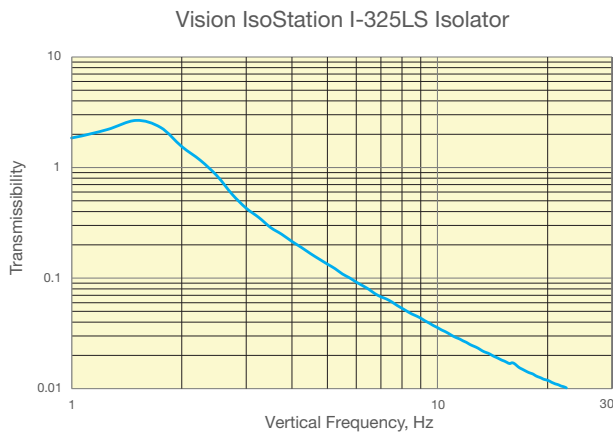


Ergonomic frame design provides enough legroom for seated user

Performance

Isolation

The vibration isolation in Vision IsoStation Plus workstation is provided Newport's high-performance I-325LS Series pneumatic isolators that incorporate hybrid chamber designs, laminar flow damping and horizontal pendulum isolation to provide a quiet and stable isolation. The isolators are self-centered with a long stroke, making the floating process much easier. They provide 1,300 lb gross load capacity and reduce transmitted vertical and horizontal vibrations by 85% or more after 5Hz and by more than 95% after 10Hz. Non-isolated versions are also available and can be field upgraded to provide isolated performance in the future.



Model	Vertical Isolation Res (Hz)	Vertical Isolation 5Hz (%)	Vertical Isolation 10Hz (%)	Horizontal Isolation Res (Hz)	Horizontal Isolation 5Hz (%)	Horizontal Isolation 10Hz (%)	Amplification at Resonance, Vert (dB)	Amplification at Resonance, Horiz (dB)	Load per Isolator (lb (kg))
I-325LS	1.5	86	96	1.25	87	96	9	10	325 (150)

Platforms

The Vision IsoStation Plus workstations are available in multiple platform sizes from 30"x30" up to 36"x72" to accommodate the widest range of applications from small bio-instrumentation isolation up to medium size optical investigations that may have previously required a full-sized optical table. Two standard worksurface thicknesses are available. A 2" thick breadboard provides a 34 inch working height and the 4" thick breadboard provides a 36 inch working height. Custom worksurfaces are also available including special materials, thru holes and custom shapes to provide OEM's and multi-user facilities with a more customized solution.



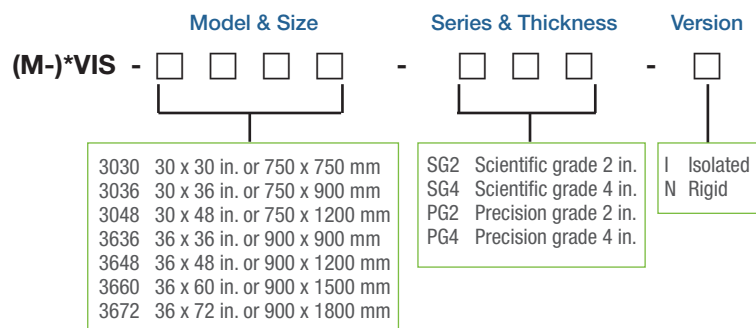
2 in. Breadboards



4 in. Breadboards

	Precision Grade PG Series	Scientific Grade SG Series
Modal Damping	Modal Dampers	N/A
Broadband Damping	Constrained layer core, damped working surface, and composite edge finish	
Sizes [in. (mm)]	30 x 30 to 36 x 72 (750 x 750 to 900 x 1800)	
Thickness [in. (mm)]	2.32 (58.9), 4.32 (109.7)	
Working Surface	3/16 in. (4.8 mm) thick 430 ferromagnetic stainless steel	
Surface Flatness [in. (mm)]	±0.004 in. (0.1 mm) over any 2 ft. (600 mm) square	
Bottom Skin	3.4 mm thick Carbon Steel	
Core Design	Trussed honeycomb, Vertically bonded closed cell construction, 0.010 in. (0.25 mm) Steel sheet materials, 0.030 in. (0.76 mm) triple core interface	
Side Panel	Highly Damped Composite Wood	
Mounting Hole Type	Cut (not rolled) threads with countersink 1/4-20 (M6) holes on 1 in. (25 mm) grid 0.5 in. (12.5 mm) borders	
Hole/Core Sealing	Easy clean conical cup 0.75 in. (19 mm) deep Non-corrosive high impact polymer material	

Base Model Numbers



Accessories

Our optical workstation accessories feature quality design and ease of use features. From monitor holders to faraday cages to a wide variety of shelf systems, we have the accessories needed to customize your optical workstation. They are designed specifically to improve ease of installation while minimizing lab space requirements.

Overhead Shelf

The overhead shelf features a 200 lb load capacity. Specially designed front and rear edge guards prevent expensive instruments from accidentally falling onto the workstation and either causing equipment damage or creating a potentially dangerous laser safety issue. Add-on shelf can be purchased separately to build double-deck overhead shelf for additional storage space.

Side, Extension and Sliding Shelves

To help users optimize the vibration isolated worksurface, the side and extension shelves provide a spacious, non-isolated work area for documentation, sample preparation or component assembly. They mount directly to the corner brackets and can be installed at either side of the workstation.

The sliding shelf slides side to side over the breadboard and provides a rigid surface to place probes or other equipment near their applications without disturbing the isolated setup. It includes two support rails that directly attach to corner brackets and does not require front and rear hip guards.

Ergonomic Support Bar with Armrest

The front support bar or hip guard includes padded armrests and provides an ergonomic support for users that are manipulating microscopes, instruments or performing precision assembly. The hip guard can also serve as a mounting area for other accessories including monitor arms, keyboard shelves or serve as a protective barrier for the workstation.

Faraday Cage

The faraday cage helps reduce electromagnetic interference from affecting sensitive experiments or processes like patch-clamp investigations or sensor calibration. The Faraday Cage is shipped fully assembled and mounts on top of the corner brackets to provide clearance for the use of other accessories.

Computer Storage

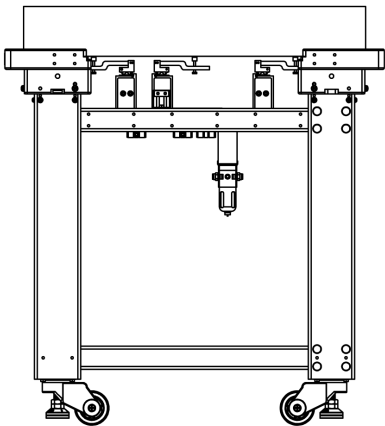
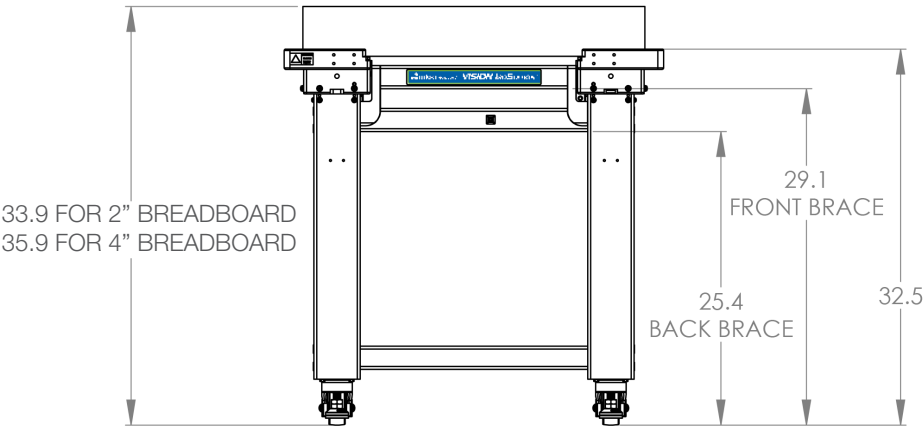
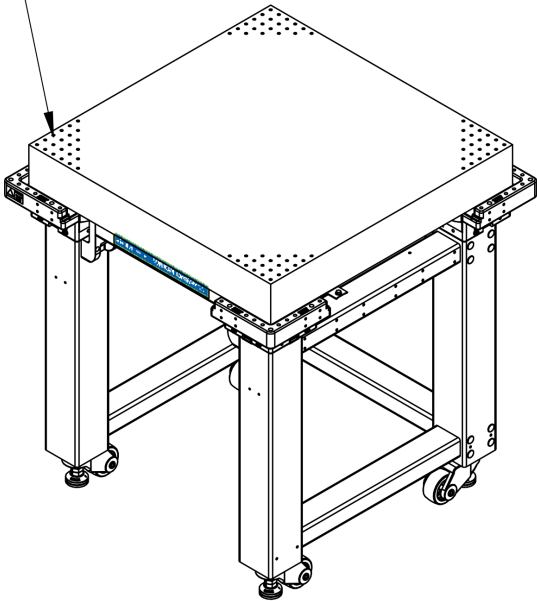
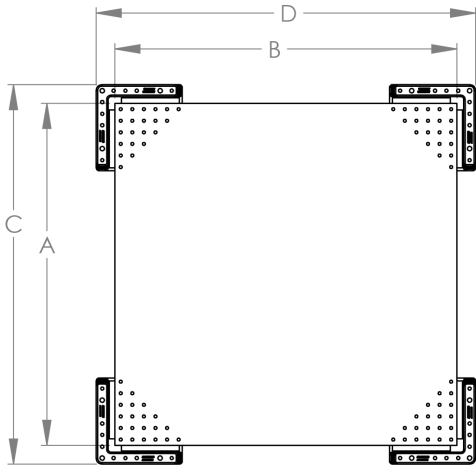
The keyboard and flat panel monitor arm accessories can mount to the workstation frame, corner brackets, or the hip guard to provide optimal accessibility and flexibility. Both the keyboard shelf and monitor arm feature articulated arms. A side mounted shelf provides a safe and organized place to locate a desktop computer chassis or other small instruments.

ACWS Air Compressor

Newport offers a low-cost, ultra-quiet air compressor to provide a clean, high-quality and reliable air supply to properly float Vision IsoStation Plus workstations. The ACWS air compressor features a smaller footprint, lighter weight and an ultra-quiet 30dB operating noise level for use in sensitive lab environments.

Dimensional Drawings

1/4-20 x 1" S[ACING, 1/2" BORDER FOR VIS-
M6 x 25mm SPACING, 12.5mm BORDER FOR M-VIS



ISOLATOR VERTICAL STROKE LENGTH: 0.6"

VIS SYSTEM	DIM A	DIM B	DIM C (Inches)	DIM D (Inches)
VIS3030-XXX-I/N	30.0 in	30.0 in	32.8	32.8
VIS3036-XXX-I/N	30.0 in	36.0 in	32.8	38.8
VIS3048-XXX-I/N	30.0 in	48.0 in	32.8	50.8
VIS3636-XXX-I/N	36.0 in	36.0 in	38.8	38.8
VIS3648-XXX-I/N	36.0 in	48.0 in	38.8	50.8
VIS3660-XXX-I/N	36.0 in	60.0 in	38.8	62.8
VIS3672-XXX-I/N	36.0 in	72.0 in	38.8	74.8
M-VIS3030-XXX-I/N	750 mm	750 mm	32.8	32.8
M-VIS3036-XXX-I/N	750 mm	900 mm	32.8	38.8
M-VIS3048-XXX-I/N	750 mm	1200 mm	32.8	50.8
M-VIS3636-XXX-I/N	900 mm	900 mm	38.8	38.8
M-VIS3648-XXX-I/N	900 mm	1200 mm	38.8	50.8
M-VIS3660-XXX-I/N	900 mm	1500 mm	38.8	62.8
M-VIS3672-XXX-I/N	900 mm	1800 mm	38.8	74.8

XXX = SG2, SG4, PG2, OR PG4

