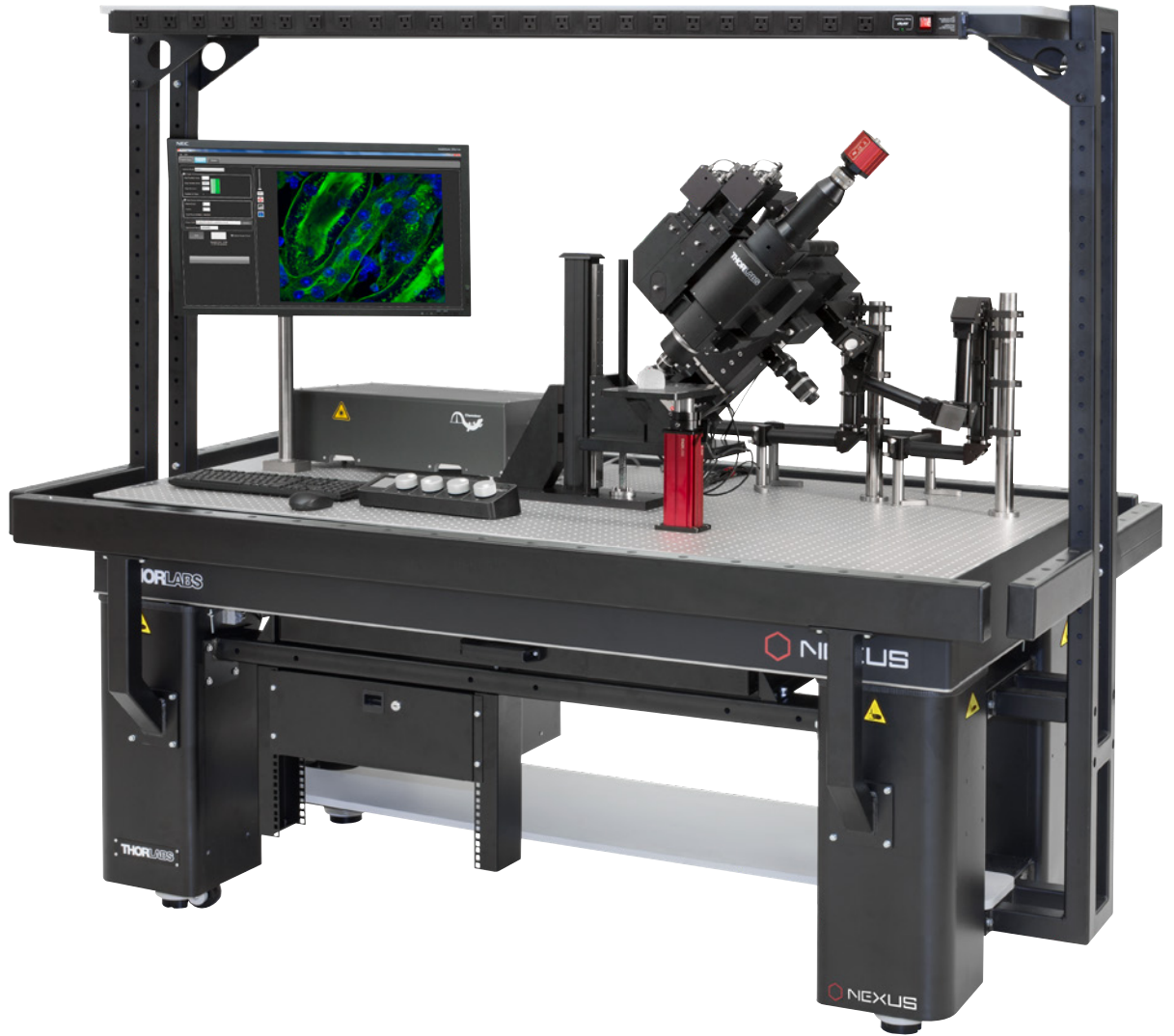


# Workstations



## Vibration Isolation Solutions

Thorlabs manufactures a wide range of workstations, optical tables, table supports, and honeycomb breadboards. Each option is designed to dampen or isolate vibrations created by an experimental apparatus or from external sources in the lab, making them ideal for use in any demanding imaging application.

All of our workstation and table supports are offered with active-air, self-leveling isolators, which provide the high level of isolation necessary to meet demanding experimental needs, such as those required during imaging. In addition, our workstations have a modular supporting frame system that is compatible with a number of ergonomic accessories optimized for use with an imaging system.

**THORLABS**

# Nexus<sup>®</sup> Optical Table Workstation and Accessories

## Overhead Shelving System

Contains two overhead shelves that span the entire frame length. Shelves can be positioned at various heights on the support struts.

**Brackets with Through Hole**  
Allow for easy cable management.

**24-Outlet Power Strip**  
Allows ease of accessibility to numerous outlets for power supplies and control modules.

## Side Lean Bars

Bolt to the overhead shelf support struts, protect the table from incidental contact, and make the frame compatible with various shelving options and accessories.

## Front/Rear Lean Bars

Protect the table from incidental contact and make the frame compatible with various shelving options and accessories.

## Casters

Allow movement of frame around the lab. Leveling feet can be adjusted to secure the workstation in the desired location.

## Table Frame

Rugged all-steel construction. Active vibration isolators are welded together in pairs and connected by steel tie bars (includes under table shelf).

## Under Table Shelf

This removable shelf is included with the table frame. It spans the entire length and half the width of the workstation, making it ideal for storing large power supplies or control modules.

Thorlabs' Nexus Optical Table Workstations are high-quality, accessorized, ergonomic frame systems that allow for integration of both office and lab work spaces. Our active-isolation models feature self-leveling supports that perfectly complement our range of broadband-vibration-damping Nexus Optical Tables to provide an excellent workstation for the most demanding imaging applications.

A complete workstation includes an optical table, table frame, under table shelf, and caster wheels. In addition, we offer accessories including lean bars, overhead shelves, cable racks, storage drawers, power strips, light strips, a 19" rack chassis, and computer accessories, which are the key to creating an ergonomic workspace. More details on selected accessories can be found on the opposite page, while all of our accessories can be found by visiting [www.thorlabs.com](http://www.thorlabs.com). See the image above for an example workstation configuration.

For applications that are less sensitive to the detrimental effects of lab-transmitted vibrations, rigid non-isolating and passive frame supports are available. Visit [www.thorlabs.com](http://www.thorlabs.com) for details.

## Features

- ◆ Active-Air, Self-Leveling Supports
- ◆ 600 mm or 700 mm Frame Heights Available
- ◆ Broad Selection of Integrable Accessories

## Example Applications\*

- ◆ Multiphoton Microscopy
- ◆ Confocal Microscopy
- ◆ Electrophysiology
- ◆ Cell Injection
- ◆ Scanning Probe Microscopy

\*See the back page for application-specific recommendations.

## Optical Table Size Options

- ◆ 1 m x 2 m x 210 mm  
(3' x 6' x 8.3")
- ◆ 1.2 m x 2 m x 210 mm  
(4' x 6' x 8.3")
- ◆ 1.2 m x 2.5 m x 210 mm  
(4' x 8' x 8.3")
- ◆ 1.2 m x 2 m x 310 mm  
(4' x 6' x 12.2")
- ◆ 1.2 m x 2.5 m x 310 mm  
(4' x 8' x 12.2")

## 24-Outlet Power Strips



- ◆ Fit Underneath or Onto the Edge of the Overhead Shelf
- ◆ 24 Surge-Protected Outlets for Easy Accessibility
- ◆ US, EU, or UK Outlets

## LED Light Strips

- ◆ Fit Underneath Overhead Shelves
- ◆ Span the Length of the Work Surface
- ◆ On/Off Switch Provides Easy Access to Lighting



## 19" Rack Chassis



- ◆ Attaches Directly to Workstation Frame
- ◆ Shelving for Holding Various Controllers, Supplies, or Kits
- ◆ Drawers Provide Convenient Storage
- ◆ 8U Capacity that Holds up to 60 kg (132 lb)

## Under Table Drawer

- ◆ Attaches Directly to the Workstation Frame
- ◆ 1 m (39.37") Long Drawer with a Rubber-Lined Base to Protect Components and Devices
- ◆ Dividers Provided for Organization of Supplies
- ◆ Easily Accessible for Convenient Storage



## Cable Trays

- ◆ Fit Underneath or Onto the Edge of the Overhead Shelves
- ◆ Organize Cables and Optical Fibers

Visit [www.thorlabs.com](http://www.thorlabs.com) to view our entire line of workstation accessories.

# ScienceDesk™ Workstation and Accessories

## Overhead Shelf

Shelves span the width of the frame and are supported by stainless steel posts, which allow for height adjustment. Two shelves can be mounted on one set of posts.

## Sample Prep Shelf

Shelves rest on the upper rails of the frame, creating a movable workspace.

## Monitor Mount

Articulating arm supports most types of flat screen monitors.

## Computer Shelf

Specialized shelf conveniently holds a computer tower.

## Keyboard Holder

Frame-mounted keyboard and mouse holder rotates 360°, allowing it to be ergonomically positioned.

## Heavy-Duty Casters

Casters allow movement of the workstation within the lab. Leveling feet can be adjusted once the desk is in the desired location.

## ScienceDesk Frame

Specialized frame fully encloses the tabletop, protecting it from accidental movement and allowing placement of accessories. Two heights are available, allowing the user to sit or stand.

## Adjustable Wrist Rest

Designed to provide the optimal height and angle for delicate instrument adjustments on the tabletop.

## Tabletop

Our Nexus® tabletops provide excellent damping, thermal stability, and rigidity. We offer a range of sizes to accommodate a variety of microscope systems.

## Side Shelf

Shelves mount to the upper or lower side rails of the frame, providing extra space to the side of the tabletop.

## Breadboard Mounting Brackets

Used to attach breadboards to the ScienceDesk Frame.

## Tool Caddy and Magnetic Storage Tray

Tool Caddy for general storage and benchtop organizers. Storage Tray holds small tools, cap screws, and other fasteners securely. Attaches to any magnetic surface.

## Under Shelf

This shelf provides a large depth while still giving leg clearance.

## 19" Rack Chassis and Drawer

Standard 19" EIA equipment rack with 8U capacity. Lockable 19" rack drawer for storage.



ScienceDesks are high-quality ergonomic workstations with a modular system of accessories (visit [www.thorlabs.com](http://www.thorlabs.com) to view all of the options), making them ideal for use in imaging applications. When equipped with active-air, self-leveling isolators, they meld form and function to produce a portable, industry-leading, vibrationally isolated workstation. The tabletop is inset within the frame, protecting it and anything on it from any incidental contact that may occur when working in the lab environment. See the image above for an example ScienceDesk configuration with details on selected accessories. All of our accessories can be viewed by visiting [www.thorlabs.com](http://www.thorlabs.com).

Thorlabs offers a variety of stainless steel tabletops, with or without regularly spaced mounting holes, designed for use with our ScienceDesk frames. Frames that are designed for standing or for use in the corner of a lab are shown on the following page.

For applications that are less sensitive to the detrimental effects of lab-transmitted vibrations, rigid non-isolating and passive frame supports are available. Visit [www.thorlabs.com](http://www.thorlabs.com) for details.

## Features

- ◆ Active-Air, Self-Leveling Supports
- ◆ Models Available for Sitting or Standing
- ◆ Modular Accessory Options Allow for Optimal Arrangement of Supporting Equipment

## Example Applications\*

- ◆ High-Resolution Optical Microscope
- ◆ Confocal Microscopy
- ◆ Electrophysiology
- ◆ Cell Injection
- ◆ Scanning Probe Microscopy

\*See the back page for application-specific recommendations.

## Tabletop Size Options

- ◆ 0.60 m x 0.90 m  
(2' x 3')
- ◆ 0.75 m x 0.90 m  
(2.5' x 3')
- ◆ 0.75 m x 1.20 m  
(2.5' x 4')
- ◆ 0.90 m x 1.20 m  
(3' x 4')
- ◆ 0.7 m<sup>2</sup> Corner  
Desk Option



## Corner ScienceDesk

The corner ScienceDesk has been specially designed to fit in the corner of the lab and permits access to the entire breadboard surface from the slanted corner.

These corner desks are available with active self-leveling isolation, heavy-duty passive isolation, or rigid non-isolating supports. They are supplied complete with a Nexus® tabletop and are compatible with 2' and 600 mm deep lab furniture.



## Standing Height ScienceDesk

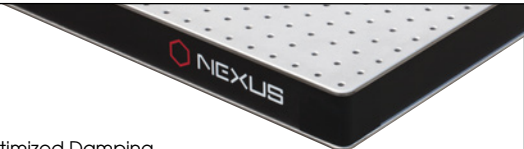
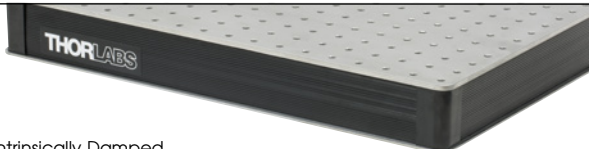





The standing height ScienceDesk is 910 mm high and is supplied with active self-leveling isolation. Available in two work surface sizes, 0.75 m x 0.90 m (2.5' x 3') and 0.90 m x 1.20 m (3' x 4'), it is designed to provide a comfortable and ergonomic working position while standing or seated at a lab stool.

Height extenders are also available to increase the height of any standard 765 mm high desk to a 910 mm standing height.

## Optical Tabletops

Tabletops are available from stock in a variety of sizes with sealed or unsealed 1/4"-20 (M6) taps or without taps; they can be fabricated from either magnetic or nonmagnetic steel. Both our Nexus® tabletops with optimized damping and our intrinsically damped tabletops are compatible with our ScienceDesk Workstations. We also offer solid aluminum and optically clear acrylic tabletops for general-purpose lab use; visit [www.thorlabs.com](http://www.thorlabs.com) for details.

In addition to our stocked items, Thorlabs is capable of designing custom tabletops for some of the most demanding and complex applications.

<b>Tabletops</b>	 Nexus, Optimized Damping	 Intrinsically Damped
Breadboard Thickness	60 mm (2.4") 110 mm (4.3")	58 mm (2.28")
Working Surface	4003 Grade Stainless Steel Top Plate	
Ferromagnetism	Magnetic or Non-Magnetic	Magnetic
Holes	Sealed (25 mm Depth) or Non-Sealed	Non-Sealed
Threads and Spacing	1/4"-20 (M6) Tapped Holes on 1" (25 mm) Centers or Untapped Top Plate	1/4"-20 (M6) Tapped Holes on 1" (25 mm) Centers
<b>Performance</b>		
Damping		
Stiffness	 60 mm (2.4") Thick	 58 mm (2.28") Thick
	 110 mm (4.3") Thick	

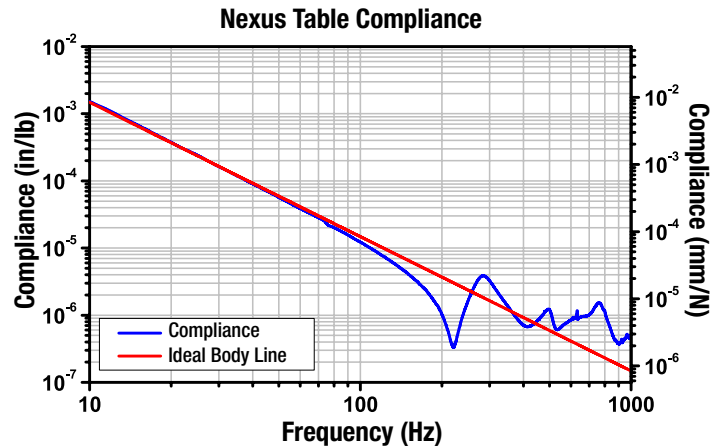
# Nexus<sup>®</sup> Optical Tables

Thorlabs' Nexus Optical Tables feature all-steel construction, excellent thermal stability, and broadband vibration damping optimized for each table. They provide durable, rigid working surfaces that will quickly dampen vibrations created on the tabletop.

When a Nexus Optical Table is paired with one of our active isolation support options on the following page, a system is created that is ideal for any imaging or microscopy application requiring sub-micron resolution.

## Features

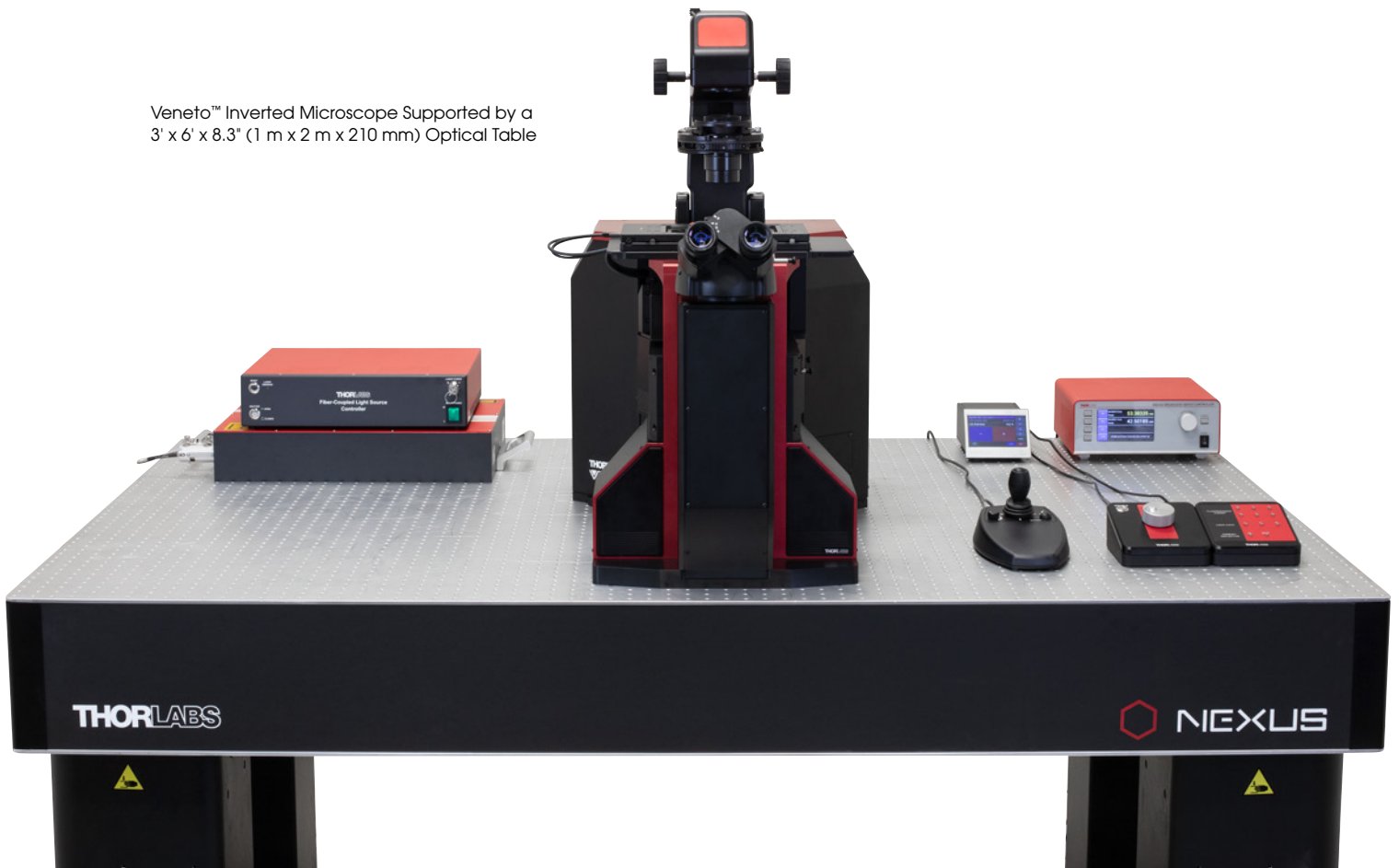
- ◆ Sizes Up to 1.5 m x 4.0 m (4.8' x 14')
- ◆ Three Thicknesses: 210 mm, 310 mm, or 460 mm
- ◆ Optimized Broadband Damping for Isolating Vibrations Created on the Tabletop
- ◆ Every Product Tested and Shipped with Unique Test Data Certificate
- ◆ Large Work Area to Support Imaging Systems, Laser Sources, and Components
- ◆ Sealed 1/4"-20 (M6) Tapped Holes Available
- ◆ Through Ports Available for Cable Management
- ◆ Steel-to-Steel Bonding Throughout Increases Thermal Stability



Compliance Curve for a 1 m x 2 m x 210 mm Nexus Table

Each product is individually optimized and shipped with a unique test data certificate. Doing so provides more accurate data than using a single size-specific compliance curve to represent the entire product line.

Veneto™ Inverted Microscope Supported by a 3' x 6' x 8.3" (1 m x 2 m x 210 mm) Optical Table



# Optical Table Supports



**Passive Optical Table Support**  
Closed Pneumatic Isolation System



**Active Optical Table Support**  
Self-Leveling for Constant Height

**Rigid Optical Table Supports**  
Upgradable to Passive Isolation  
Using the PWA076 Kit

## Features

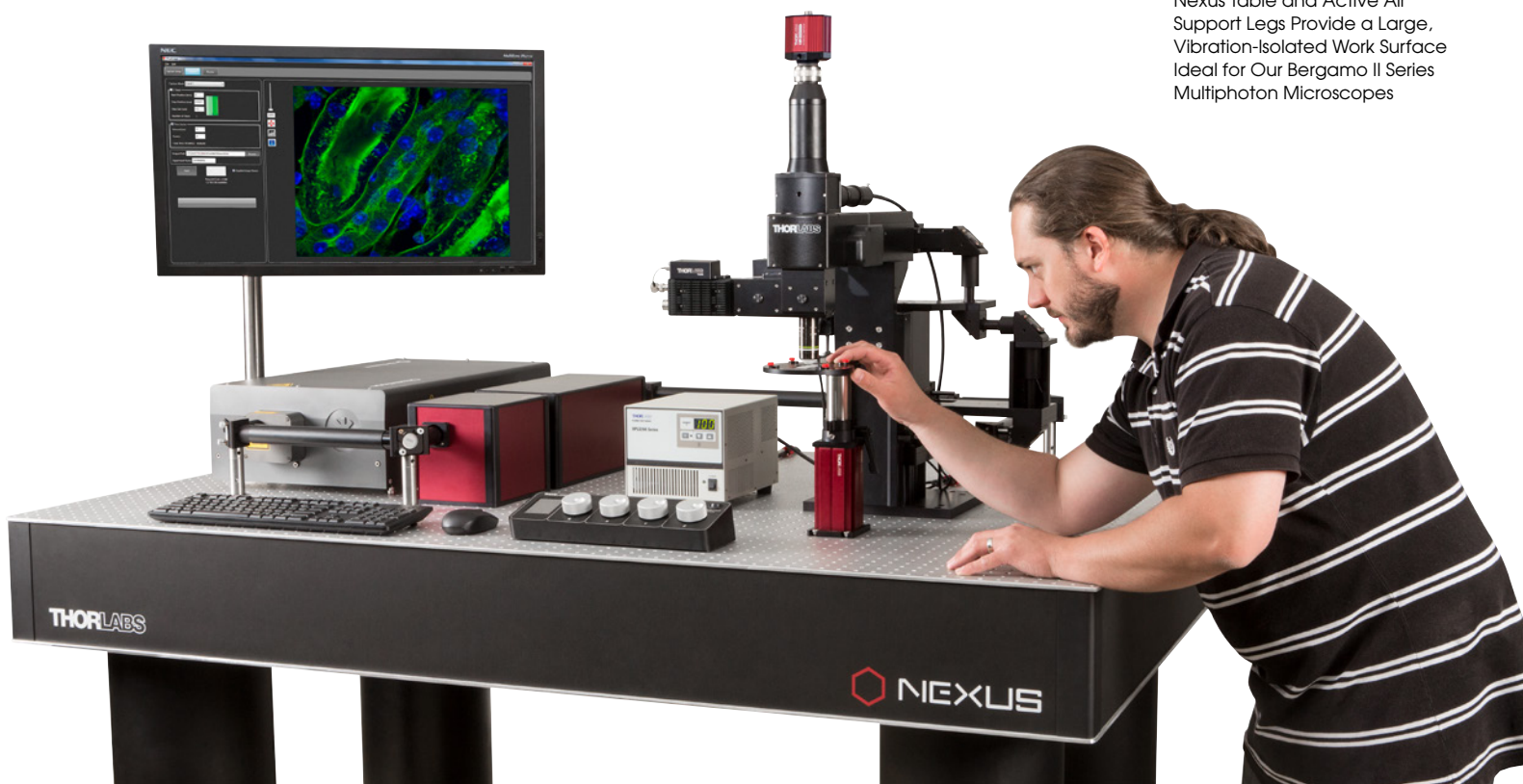
- ◆ Three Support Options
  - Active Air (<0.001  $\mu\text{m}$  Resolution Achievable)
  - Passive (<0.1  $\mu\text{m}$  Resolution Achievable)
  - Rigid, Non-Isolating (<1  $\mu\text{m}$  Resolution Achievable)
- ◆ Rigid Supports Upgradable to Passive Isolation
- ◆ High Load Capacity:  $\leq 2,500$  kg (Support Dependent)
- ◆ 700 mm, 600 mm, and 450 mm Heights

An optical table system is subjected to continuous vibrational impulses from the laboratory floor. These vibrations may be caused by large machinery within the building or even wind- or traffic-excited building resonances (swaying).

Thorlabs offers four variations of optical table supports: rigid, non-isolating; passive isolation; heavy-duty passive; and active self-levelling. The passive and active isolation supports provide vibration damping for both vertical and horizontal vibrations.

We also offer optical table workstations (see page 2), which are available with a host of accessories that enable the creation of a complete optical table workstation.

Nexus Table and Active Air Support Legs Provide a Large, Vibration-Isolated Work Surface Ideal for Our Bergamo II Series Multiphoton Microscopes



# What Should I Use for My Application?

The selection guide below provides our recommended optical tables or tabletops for four common imaging applications. Once an optical table or tabletop is selected, read across the selection guide to see our recommended vibration isolation support option and accessories. These recommendations are based on the application's desired support features, such as the size of the imaging system and the amount of vibration isolation needed.

Application	Desired Support Features	Recommended Optical Table or Tabletop	Imperial Item # (Metric Item #)	Recommended Workstation	Item #
Multiphoton Microscopy (Bergamo II Series)	<ul style="list-style-type: none"> <li>– Large Work Area with High Clearance</li> <li>– High Vibration Damping Due to Many Motorized Components</li> <li>– Liquid Spill Management</li> <li>– Isolation from Lab Vibrations</li> <li>– Shelving for Laser Sources and Equipment</li> </ul>	4' x 6' x 12.2" (1.2 m x 2 m x 310 mm) Optical Table with Sealed Mounting Holes for Spill Management	T46W (T1220Q)	Nexus Optical Table Frame with Active Isolation (See Page 2) Recommended Accessories: Lean Bars, Computer Mounts, Shelving, Rack Chassis, Power and Light Strips, and Cable Racks	TF1220A6
		4' x 8' x 12.2" (1.2 m x 2.5 m x 310 mm) Optical Table with Sealed Mounting Holes for Spill Management	T48W (T1225Q)		TF1225A6
Confocal Microscopy (Cerna Series)	<ul style="list-style-type: none"> <li>– Mid-Sized Work Area with High Clearance</li> <li>– Vibration Damping Due to Some Moving Parts</li> <li>– Liquid Spill Management</li> <li>– High Isolation from Lab Vibrations</li> <li>– Shelving for Equipment</li> </ul>	3' x 6' x 8.3" (1 m x 2 m x 210 mm) Optical Table with Sealed Mounting Holes for Spill Management	T36V (T1020P)		TF1020A7
		4' x 6' x 8.3" (1.2 m x 2 m x 210 mm) Optical Table with Sealed Mounting Holes for Spill Management	T46V (T1220P)		TF1220A7
Electrophysiology (Cerna Series)	<ul style="list-style-type: none"> <li>– Small to Mid-Sized Work Area</li> <li>– Vibration Damping Due to Some Moving Parts</li> <li>– Liquid Spill Management</li> <li>– High Isolation from Lab Vibrations</li> <li>– Shelving for Equipment</li> <li>– Faraday Cage Shielding</li> </ul>	3' x 6' x 8.3" (1 m x 2 m x 210 mm) Optical Table with Sealed Mounting Holes for Spill Management	T36V (T1020P)	Nexus Optical Table Frame with Active Isolation (See Page 2) Recommended Accessories: Lean Bars, Computer Mounts, Shelving, Rack Chassis, Power and Light Strips, Cable Racks, and a Faraday Enclosure (FAR05F)	TF1020A7
		3' x 4' x 2.4" (0.9 m x 1.2 m x 60 mm) Optical Tabletop with Sealed Mounting for Spill Management	B3648T (B90120L)		ScienceDesk Frame with Active Isolation (See Page 4) Recommended Accessories: Computer Mounts, Shelving, Rack Chassis, Power and Light Strips, Cable Racks, and a Faraday Enclosure (FAR05F)
		2.5' x 3' x 2.4" (0.75 m x 0.9 m x 60 mm) Optical Tabletop with Sealed Mounting Holes for Spill Management	B3036T (B7590L)	ScienceDesk Frame with Active Isolation (See Page 4) Recommended Accessories: Computer Mounts, Shelving, Rack Chassis, Power and Light Strips, and Cable Racks	SDA7590
3' x 4' x 2.4" (0.9 m x 1.2 m x 60 mm) Optical Tabletop with Sealed Mounting Holes for Spill Management	B3648T (B90120L)	SDA90120			
Widefield Imaging (Cerna Series)					



56 Sparta Avenue • Newton, New Jersey 07860  
Sales: 973.300.3000 • Fax: 973.300.3600 • www.thorlabs.com

USA | www.thorlabs.com  
Thorlabs Imaging Systems  
Phone: 1-703-651-1700

Thorlabs Scientific Imaging (TSI)  
Phone: 1-973-300-3000

Thorlabs Quantum Electronics (TQE)  
Phone: 1-973-300-3000

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Phone: 1-973-300-3000

Thorlabs Vytran Division  
Phone: 1-973-300-3000

CANADA | www.thorlabs.com  
Thorlabs Canada (ULC)  
Phone: 1-973-300-3000

UK | www.thorlabs.de  
Phone: +44 (0)1353 654440

Thorlabs Vytran Europe  
Phone: +44 (0) 1392-445777

FRANCE | www.thorlabs.de  
Phone: +33 (0) 970 444 844

GERMANY | www.thorlabs.de  
Thorlabs GmbH  
Phone: +49 (0) 8131 5956-0

Thorlabs GmbH (Lübeck)  
Phone: +49 (0) 8131-5956-0

Thorlabs Elliptec GmbH  
Phone: +44 (0)1353 654440

CHINA | www.thorlabschina.cn  
Phone: +86 (0) 21-60561122

SWEDEN | www.thorlabs.com  
Phone: +46 31 733 30 00  
Polish Direct Line: +48 22 219 52 30

JAPAN | www.thorlabs.co.jp  
Phone: +81-3-6915-7701

BRAZIL | www.thorlabs.com  
Phone: +55 (21) 2018 6490