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 vibration isolation necessary to meet demanding experimental needs. In addition, our workstations have a modular supporting frame system that is compatible with a number of ergonomic accessories optimized for use with imaging systems.
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 key to creating an ergonomic workspace. More details on select accessories can be found on the opposite page; for all accessories visit 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 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
  
- 1.2 m x 2 m x 210 mm
  
- 1.2 m x 2.5 m x 210 mm
  
- 1.2 m x 2 m x 310 mm
  
- 1.2 m x 2.5 m x 310 mm

(3’ x 6’ x 8.3”)

(4’ x 6’ x 8.3”)

(4’ x 8’ x 8.3”)

(4’ x 6’ x 12.2”)

(4’ x 8’ x 12.2”)

---

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

**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.

**24-Outlet Power Strip**
- Provides easy access 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.

**Casters**
- Allow movement of frame around the lab. Leveling feet can be adjusted to secure the workstation in the desired location.
12- and 24-Outlet Power Strips
- Fit Underneath or on the Edge of the Overhead Shelf
- 12 or 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 Supplies Organization
- Easily Accessible for Convenient Storage

Cable Trays
- Fit Underneath or on the Edge of the Overhead Shelves
- Organize Cables and Optical Fibers

Visit www.thorlabs.com to view our entire line of workstation accessories.
ScienceDesks are high-quality ergonomic workstations with a modular system of accessories (visit 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.

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 for details.

### 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 m² Corner Desk Option**

### 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.
Corner ScienceDesk

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

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 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 for details.

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

<table>
<thead>
<tr>
<th>Tabletops</th>
<th>Nexus, Optimized Damping</th>
<th>Intrinsically Damped</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breadboard Thickness</td>
<td>60 mm (2.4”)</td>
<td>110 mm (4.3”)</td>
</tr>
<tr>
<td></td>
<td>58 mm (2.28”)</td>
<td></td>
</tr>
<tr>
<td>Working Surface</td>
<td>430 Grade Stainless Steel Top Plate</td>
<td>304L Grade Steel Top Plate</td>
</tr>
<tr>
<td>Ferromagnetism</td>
<td>Magnetic</td>
<td>Non-Magnetic</td>
</tr>
<tr>
<td>Holes</td>
<td>Sealed (25 mm Depth) or Non-Sealed</td>
<td>Non-Sealed</td>
</tr>
<tr>
<td>Threads and Spacing</td>
<td>1/4”-20 (M6) Tapped Holes on 1” (25 mm) Centers or Untapped Top Plate</td>
<td>1/4”-20 (M6) Tapped Holes on 1” (25 mm) Centers</td>
</tr>
</tbody>
</table>

**Performance**

| Damping | | |
|---------|---------------------|
|        | 60 mm (2.4”) Thick |
|        | 58 mm (2.28”) Thick |

<table>
<thead>
<tr>
<th>Stiffness</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>60 mm (2.4”) Thick</td>
<td></td>
</tr>
<tr>
<td>110 mm (4.3”) Thick</td>
<td></td>
</tr>
</tbody>
</table>
Nexus® 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 any 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

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.

Cerna® Electrophysiology Rig Supported by a 3’ x 6’ x 8.3” (1 m x 2 m x 210 mm) Optical Table
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-leveling. 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.
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 compatible accessories. These recommendations are based on the application’s desired support features, such as the size of the imaging system and the required amount of vibration isolation.

<table>
<thead>
<tr>
<th>Application</th>
<th>Desired Support Features</th>
<th>Recommended Optical Table or Tabletop</th>
<th>Imperial Item # (Metric Item #)</th>
<th>Recommended Workstation Item #</th>
<th>Item #</th>
</tr>
</thead>
</table>
| Multiphoton Microscopy (Bergamo® II Series) | - Large Work Area with High Clearance  
- High Vibration Damping Due to Many Motorized Components  
- Liquid Spill Management  
- Isolation from Lab Vibrations  
- Shelving for Laser Sources and Equipment | 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 |
| Confocal Microscopy (Cerna® Series) | - Mid-Sized Work Area with High Clearance  
- Vibration Damping Due to Some Moving Parts  
- Liquid Spill Management  
- High Isolation from Lab Vibrations  
- Shelving for Equipment | 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) | ScienceDesk Frame with Active Isolation (See Page 4)  
Recommended Accessories: Computer Mounts, Shelving, Rack Chassis, Power and Light Strips, and a Faraday Enclosure (FAR05F) | SDA90120 |
| Electrophysiology (Cerna Series) | - Small to Mid-Sized Work Area  
- Vibration Damping Due to Some Moving Parts  
- Liquid Spill Management  
- High Isolation from Lab Vibrations  
- Shelving for Equipment  
- Faraday Cage Shielding | 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) | ScienceDesk Frame with Active Isolation (See Page 4)  
Recommended Accessories: Computer Mounts, Shelving, Rack Chassis, Power and Light Strips, and a Faraday Enclosure (FAR05F) | SDA7590 |
| Widefield Imaging (Cerna Series) | - 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 | 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 (890120L) | ScienceDesk Frame with Active Isolation (See Page 4)  
Recommended Accessories: Computer Mounts, Shelving, Rack Chassis, Power and Light Strips, and a Faraday Enclosure (FAR05F) | SDA90120 |

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