▼ TECHNOLOGY

Optomechanics

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▼ CHAPTERS	
Tables/ Breadboards	StandardPlus Series of Optical Tabletops (Page 1 of 2)
Mechanics	
Optomechanic Devices	
Kits	THORLOG
Lab Supplies	
▼ SECTIONS	
Breadboards	
Breadboard Supports	
Breadboard Accessories	The PTM12104 optical tabletop is was a second and a second s
ScienceDesk	shown with the PTP603 passive
ScienceDesk Accessories	isolation system Table Supports Sold Separately For our full line of vibration-
Optical Tables	isolation systems, see pages 59-66.
Table Supports	The StandardPlus Series of optical tables feature the same design techniques and materials as the Standard Series but offer increased
Optical Table Accessories	stiffness when compared to Standard Series models due to the increased thickness [12.2" (310 mm) compared to 8.3" (210 mm)].

Choose a StandardPlus table if your application would benefit from reduced compliance at a given frequency.

All Thorlabs tabletops offer the highest levels of surface flatness available, high dynamic stiffness, and low relative tabletop motion, making them the obvious choice for any scientific application.

US Patent 5402734

Standard Series - Suited for Less-Demanding, General Photonics Applications

Features

- Athermalized Design for Excellent Thermal Stability
- Minimal Deflection Under Load
- High-Density Honeycomb Core
- Excellent Surface Flatness, Achieved by Using a Single State-of-the-Art Material and a Thermal Bonding Process Under Pressure
- Flatness: ±0.004" (±0.1 mm) Over any 11.0 ft² (1 m²) Area
- Double-Plated, Single Honeycomb Core
- Proprietary Broadband Damping
- Dynamic Deflection Coefficient: <1.3 x 10⁻³ Measured for PTM12109

Specifications

- **Table Thickness:** 12.2" (310 mm)
- Flatness: ±0.004" (±0.1 mm) Over any 11.0 ft² (1 m²) Area
- **Construction:** Double-Plated, Single Honeycomb Core
- Top and Bottom Plates
- Matched Materials for Athermalized Design
- Magnetic Stainless Steel, 5 mm Thick
- Top Plate is Brush Finished
- Core: High-Density, Plated Steel Honeycomb
- **Damping:** Proprietary Broadband Damping
- Sides: Black, Laminated-Steel Sides, Slightly Inset
- Mounting Hole Pattern
 - Metric: M6 x 1.0 on 25 mm Centers
 - Imperial: 1/4"-20 on 1" Centers

- Edge to First Hole Center
 - Metric: 50 mm on All Sides
 - Imperial Models (3.3' Wide): 2.0" on Ends and 2.68" on Sides
 - Imperial Models (4.1' Wide): 2.0" on Ends and 2.6" on Sides
 - Imperial Models (4.9' Wide): 2.0" on Ends and 2.52" on Sides
- Dynamic Deflection Coefficient (Max): <0.7 x 10^{-3*}
- Relative Tabletop Motion (Max): <0.27 nm (10.5 x 10⁻⁹ in)*
- Deflection Under Load: 250 lbs (113 kg) <1.65 μm (6.5 x 10⁻⁵ in)*

*Measured on a 4' x 8' ft. x 12.2" table with isolator transmissibility T<0.01 above 10 Hz, environmental vibrations PSD <10° g'/Hz.

CHAPTERS V Tables/

Breadboards

ScienceDesk ScienceDesk

Mechanics

Optomechanics

Call for Lead Time

Call for Lead Time

StandardPlus Series of Optical Tabletops (Page 2 of 2)

Imperial, StandardPlus Series of Optical Tables, 1/4"-20 Mounting Holes

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Optomechanic	WEIGHT	DIMENSIONS (L x W x H)	RMB	€	£	\$	ITEM#*
Devices	630 lbs/286 kg	6' x 3.3' x 12.2"	¥ 21,744.00	€ 2.286,00	£ 1,785.00	\$ 2,575.00	PTM12104
Kits	754 lbs/342 kg	6' x 4.1' x 12.2"	¥ 26,177.00	€ 2.752,00	£ 2,149.00	\$ 3,100.00	PTM12108
	890 lbs/404 kg	8' x 3.3' x 12.2"	¥ 26,810.00	€ 2.819,00	£ 2,201.00	\$ 3,175.00	PTM12105
	1001 lbs/454 kg	8' x 4.1' x 12.2"	¥ 31,758.00	€ 3.339,00	£ 2,607.00	\$ 3,761.00	PTM12109
Lab Supplies	1296 lbs/588 kg	8' x 4.9' x 12.2"	¥ 38,269.00	€ 4.024,00	£ 3,142.00	\$ 4,532.00	PTM12113
SECTIONS V	987 lbs/448 kg	10' x 3.3' x 12.2"	¥ 30,838.00	€ 3.242,50	£ 2,531.50	\$ 3,652.00	PTM12106
	1413 lbs/641 kg	10 'x 4.1' x 12.2"	¥ 37,695.00	€ 3.964,00	£ 3,095.00	\$ 4,464.00	PTM12110
Breadboards	1461 lbs/663 kg	10' x 4.9' x 12.2"	¥ 44,408.00	€ 4.669,00	£ 3,646.00	\$ 5,259.00	PTM12114
Breadboard	1444 lbs/655 kg	12' x 4.1' x 12.2"	¥ 44,374.00	€ 4.666,00	£ 3,643.00	\$ 5,255.00	PTM12111
Supports	1311 lbs/595 kg	12' x 4.9' x 12.2"	¥ 56,972.00	€ 5.991,00	£ 4,678.00	\$ 6,747.00	PTM12115
Breadboard	1311 lbs/595 kg	14' x 4.1' x 12.2"	¥ 54,194.00	€ 5.698,00	£ 4,450.00	\$ 6,418.00	PTM12112
Accessories	2039 lbs/927 kg	14' x 4.9' x 12.2"	¥ 71,749.00	€ 7.544,00	£ 5,891.00	\$ 8,497.00	PTM12116

*Please contact your local sales office for a quotation including shipping.

Metric, StandardPlus Series of Optical Tables, M6 x 1.0 Mounting Holes

					9		Accessories
ITEM#*	\$	£	€	RMB	DIMENSIONS (L x W x H)	WEIGHT	Accessories
PTM52504	\$ 2,575.00	£ 1,785.00	€ 2.286,00	¥ 21,744.00	2000 mm x 1000 mm x 310 mm	681 lbs/309 kg	Optical Tables
PTM52508	\$ 3,100.00	£ 2,149.00	€ 2.752,00	¥ 26,177.00	2000 mm x 1250 mm x 310 mm	672 lbs/305 kg	
PTM52505	\$ 3,175.00	£ 2,201.00	€ 2.819,00	¥ 26,810.00	2500 mm x 1000 mm x 310 mm	807 lbs/366 kg	Table Supports
PTM52509	\$ 3,761.00	£ 2,607.00	€ 3.339,00	¥ 31,758.00	2500 mm x 1250 mm x 310 mm	1016 lbs/461 kg	
PTM52513	\$ 4,532.00	£ 3,142.00	€ 4.024,00	¥ 38,269.00	2500 mm x 1500 mm x 310 mm	1195 lbs/542 kg	Optical Table Accessories
PTM52506	\$ 3,652.00	£ 2,531.50	€ 3.242,50	¥ 30,838.00	3000 mm x 1000 mm x 310 mm	961 lbs/436 kg	Accessories
PTM52510	\$ 4,464.00	£ 3,095.00	€ 3.964,00	¥ 37,695.00	3000 mm x 1250 mm x 310 mm	1228 lbs/557 kg	
PTM52514	\$ 5,259.00	£ 3,646.00	€ 4.669,00	¥ 44,408.00	3000 mm x 1500 mm x 310 mm	1466 lbs/665 kg	
PTM52511	\$ 5,255.00	£ 3,643.00	€ 4.666,00	¥ 44,374.00	3750 mm x 1250 mm x 310 mm	1197 lbs/543 kg	
PTM52515	\$ 6,747.00	£ 4,678.00	€ 5.991,00	¥ 56,972.00	3750 mm x 1500 mm x 310 mm	1748 lbs/793 kg	
PTM52512	\$ 6,418.00	£ 4,450.00	€ 5.698,00	¥ 54,194.00	4250 mm x 1250 mm x 310 mm	1294 lbs/587 kg	
PTM52516	\$ 8,497.00	£ 5,891.00	€ 7.544,00	¥ 71,749.00	4250 mm x 1500 mm x 310 mm	1955 lbs/887 kg	

*Please contact your local sales office for a quotation including shipping.

Adaptive Optics Toolkit

Features

- Out-of-the-Box Functionality for Real-Time, High-Precision Wavefront Control
- MEMS-Based DM Achieves High Spatial Resolution Due to High Actuator Count and Low Inter-Actuator Coupling
- Shack-Hartmann Wavefront Sensor with High Resolution CCD Camera and High-Quality Microlens Array
- Includes Light Source, Imaging Optics, and Associated Mounting Hardware

Thorlabs' new Adaptive Optics (AO) Toolkits remove the barrier for entry into adaptive optics, making this real-time wavefrontcorrecting technology accessible to researchers and OEM users alike. The kit includes Boston Micromachines Corporation's state of-the-art, 140-element, 3.5 micron stroke, MEMS-based deformable mirror. Also included is a Thorlabs' WFS150C Shack-Hartmann wavefront sensor, all necessary imaging optics and mounting hardware, fully functional stand-alone control software for immediate control of the system, and a low-level support library to assist with tailored applications authored by the end user. In addition, since the kit ships as three pre-aligned optomechanical sections that only need to be arranged on a user-supplied breadboard, our adaptive optics toolkits See Pages 1408-1411 provide a near out-of-the-box solution for real-time wavefront compensation.

