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## Performance Series of Optical Tabletops

Thorlabs' Performance Series of tables offer a tuned, broadband enhanced damping system, resulting in increased dynamic stiffness when compared to the Standard Series of tables. By introducing a third intermediate skin into the core of the structure, our triple-skin, double-honeycomb technology produces an exceptionally rigid composite table. The outer skins are thermally matched with the internal plate to minimize bowing due to temperature variations and cycling and ensure that the flatness of the table is maintained. Mounting holes are sealed with plated-steel cups, making the cleanup of spills easy.



US Patent 5402734  
The PTQ51504 optical table is shown with the PTP603 passive isolation system shown on page 66.

**Triple-Skin  
Double  
Honeycomb  
Design**

Table Supports Sold Separately.  
For Our Full Line of Vibration-Isolation  
Systems, See Pages 63 - 68.

### Features

- Flatness:  $\pm 0.004''$  ( $\pm 0.1$  mm) Over any 11.0 ft<sup>2</sup> (1 m<sup>2</sup>) Area
- Triple-Skin, Steel, Double Honeycomb
- Proprietary Tuned and Broadband Damping
- Dynamic Deflection Coefficient:  $< 0.7 \times 10^{-3}$
- Mounting Holes are Sealed with Plated Steel Cups for Easy Cleanup

### Specifications

- **Table Thickness:** 8.3" (210 mm)
- **Flatness:**  $\pm 0.004''$  ( $\pm 0.1$  mm) Over any 11.0 ft<sup>2</sup> (1 m<sup>2</sup>) Area
- **Construction:** Triple-Skin, Steel, Double-Honeycomb Core
- **Top and Bottom Skins**
  - Matched Materials for Athermalized Design
  - Magnetic Stainless Steel, 5 mm Thick
  - Top Skin is Brushed Finish
- **Main Core:** High-Density, Plated-Steel Honeycomb
- **Intermediate Core:** Plated-Steel Sealing Cup Honeycomb Structure, 0.5" (13 mm) Thick
- **Sides:** Black, Laminated-Steel Sides, Slightly Inset
- **Maximum Screw Length:** 5/8" (16 mm) from Table Surface
- **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):**  $< 0.7 \times 10^{-3}$ \*
- **Relative Table Motion (Max):**  $< 0.14$  nm ( $5.5 \times 10^{-9}$  in)\*
- **Deflection Under Load:**  $< 1.5$   $\mu$ m ( $5.9 \times 10^{-5}$  in) for a 250 lbs (113 kg) Load\*

\*Measured on a 4' x 8' x 12.2" table with isolator transmissibility  $T < 0.01$  above 10 Hz, environmental vibrations power spectral density (PSD)  $< 10^{-9}$  g<sup>2</sup>/Hz.

### Imperial, Performance Series of Optical Tables, 1/4"-20 Mounting Holes **Stocked in U.S. for Immediate Delivery**

ITEM#*	\$	£	€	RMB	DIMENSIONS (L x W x H)	WEIGHT
PTQ11108	\$ 4,086.80	£ 2,942.50	€ 3,146.80	¥ 32,571.80	6' x 4.1' x 8.3"	736 lbs/334 kg
PTQ11109	\$ 5,370.70	£ 3,866.90	€ 4,135.40	¥ 42,804.48	8' x 4.1' x 8.3"	968 lbs/439 kg

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

### Metric, Performance Series of Optical Tables, M6 x 1.0 Mounting Holes **Stocked in U.K. for Immediate Delivery**

ITEM#*	\$	£	€	RMB	DIMENSIONS (L x W x H)	WEIGHT
PTQ51504	\$ 3,623.20	£ 2,608.70	€ 2,789.90	¥ 28,876.90	2000 mm x 1000 mm x 210 mm	653 lbs/296 kg
PTQ51508	\$ 4,315.20	£ 3,106.94	€ 3,322.70	¥ 34,392.14	2000 mm x 1250 mm x 210 mm	800 lbs/363 kg
PTQ51509	\$ 5,515.50	£ 3,971.16	€ 4,246.90	¥ 43,958.54	2500 mm x 1250 mm x 210 mm	992 lbs/450 kg

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