

## Performance Series of Optical Tabletops (Page 1 of 2)

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-plated, double-honeycomb technology produces the most rigid composite tables in the industry. The outer skins are thermally matched with the internal plate to minimize bowing due to temperature variations and cycling and to ensure that the flatness of the table is maintained. Mounting holes are sealed with plated-steel cups, making the cleanup of spills easy.



The PTQ11104 optical table is shown with the PTP603 passive isolation system shown on page 62.

US Patent 5402734

### Performance Series – Additional Damping Outperforms Other Manufacturers' Best Tables but at a Competitive Price

#### Features

- Flatness:  $\pm 0.004$ " ( $\pm 0.1$  mm) Over any 11.0 ft<sup>2</sup> (1 m<sup>2</sup>) Area
- Triple-Plated, 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

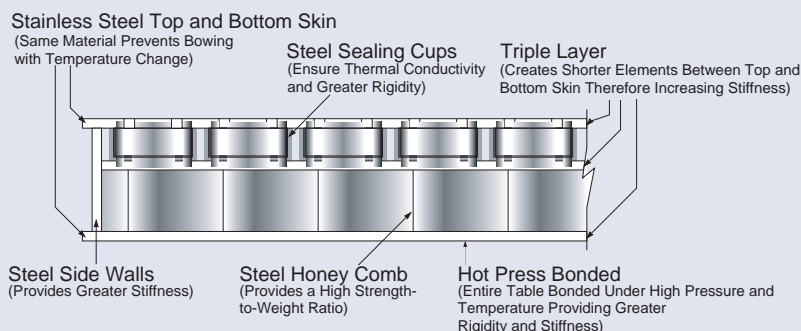
- **Table Thickness:** 8.3" (210 mm)
- **Flatness:**  $\pm 0.004$ " ( $\pm 0.1$  mm) Over any 11.0 ft<sup>2</sup> (1 m<sup>2</sup>) Area
- **Construction:** Triple-Plated, Double-Honeycomb Core
- **Top and Bottom Plates**
  - Matched Materials for Athermalized Design
  - Magnetic Stainless Steel, 5 mm Thick
  - Top Plate is Brush Finished
- **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)
- **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:** 250 lbs (113 kg):  $< 1.5$   $\mu$ m ( $5.9 \times 10^{-5}$  in)\*

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

## Performance Series of Optical Tabletops (Page 2 of 2)

### Performance Series

Tabletop with Triple-Plated,  
Double-Honeycomb Core  
Including Sealed Mounting Holes



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
PTQ11104	\$ 2,896.00	£ 2,007.50	€ 2,571.00	¥ 24,454.00	6' x 3.3' x 8.3"	641 lbs/291 kg
PTQ11108	\$ 3,237.00	£ 2,244.00	€ 2,874.00	¥ 27,334.00	6' x 4.1' x 8.3"	752 lbs/341 kg
PTQ11109	\$ 3,870.00	£ 2,683.00	€ 3,436.00	¥ 32,679.00	8' x 4.1' x 8.3"	963 lbs/437 kg

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

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

**Call for Lead Time**

ITEM#*	\$	£	€	RMB	DIMENSIONS (L x W x H)	WEIGHT
PTQ11105	\$ 3,328.00	£ 2,307.00	€ 2,954.50	¥ 28,102.00	8' x 3.3' x 8.3"	787 lbs/357 kg
PTQ11113	\$ 4,431.00	£ 3,072.00	€ 3,934.00	¥ 37,416.00	8' x 4.9' x 8.3"	1117 lbs/507 kg
PTQ11106	\$ 4,405.00	£ 3,054.00	€ 3,911.00	¥ 37,196.00	10' x 3.3' x 8.3"	910 lbs/413 kg
PTQ11110	\$ 4,710.00	£ 3,266.00	€ 4,182.00	¥ 39,772.00	10' x 4.1' x 8.3"	1153 lbs/523 kg
PTQ11114	\$ 5,468.00	£ 3,791.00	€ 4,855.00	¥ 46,172.00	10' x 4.9' x 8.3"	1419 lbs/644 kg
PTQ11111	\$ 6,139.00	£ 4,256.00	€ 5,451.00	¥ 51,838.00	12' x 4.1' x 8.3"	1371 lbs/622 kg
PTQ11115	\$ 6,919.00	£ 4,797.00	€ 6,143.00	¥ 58,425.00	12' x 4.9' x 8.3"	1613 lbs/732 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	\$ 2,896.00	£ 2,007.50	€ 2,571.00	¥ 24,454.00	2000 mm x 1000 mm x 210 mm	670 lbs/304 kg
PTQ51508	\$ 3,237.00	£ 2,244.00	€ 2,874.00	¥ 27,334.00	2000 mm x 1250 mm x 210 mm	844 lbs/383 kg
PTQ51509	\$ 3,870.00	£ 2,683.00	€ 3,436.00	¥ 32,679.00	2500 mm x 1250 mm x 210 mm	1007 lbs/457 kg

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

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

**Call for Lead Time**

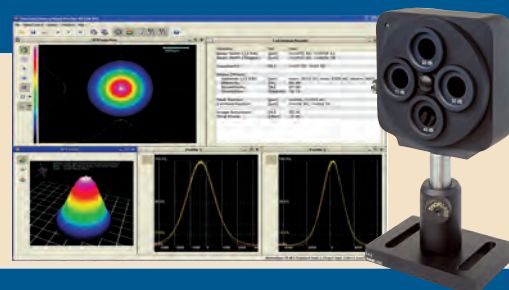
ITEM#*	\$	£	€	RMB	DIMENSIONS (L x W x H)	WEIGHT
PTQ51505	\$ 3,328.00	£ 2,307.00	€ 2,954.50	¥ 28,102.00	2500 mm x 1000 mm x 210 mm	838 lbs/380 kg
PTQ51513	\$ 4,431.00	£ 3,072.00	€ 3,934.00	¥ 37,416.00	2500 mm x 1500 mm x 210 mm	1459 lbs/662 kg
PTQ51506	\$ 4,405.00	£ 3,054.00	€ 3,911.00	¥ 37,196.00	3000 mm x 1000 mm x 210 mm	910 lbs/413 kg
PTQ51510	\$ 4,710.00	£ 3,266.00	€ 4,182.00	¥ 39,772.00	3000 mm x 1250 mm x 210 mm	1173 lbs/532 kg
PTQ51514	\$ 5,468.00	£ 3,791.00	€ 4,855.00	¥ 46,172.00	3000 mm x 1500 mm x 210 mm	1677 lbs/761 kg
PTQ51511	\$ 6,139.00	£ 4,256.00	€ 5,451.00	¥ 51,838.00	3750 mm x 1250 mm x 210 mm	1474 lbs/669 kg
PTQ51515	\$ 6,919.00	£ 4,797.00	€ 6,143.00	¥ 58,425.00	3750 mm x 1500 mm x 210 mm	1701 lbs/772 kg

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

## CCD Camera Beam Profilers

- Wavelength Range 190 to 1100 nm
- CW and TTL Triggered Single Pulse Detection
- High Dynamic Range CCD Camera with High Resolution and Low Noise

Thorlabs series of CCD camera based beam profilers, compared to scanning slit profilers, offers true 2D analysis of the beam's power density distribution. This greater detail allows complex mode patterns to be identified while optimizing the laser systems.



**See Page 1318**