### **Optomechanics**

## **Beam Traps**

- Minimizes Scattered Laser Light
- ±5° Acceptance Angle
- Ø0.433" (Ø11.0 mm) Aperture
- 3" (75 mm) Long Ø1/2" Post Included
- 30 mm Cage Compatible (See Pages 176 - 201)

30 mm

25 mm

(0.98")

Front

Cage Compatible

SM05-Threaded Aperture (0.535"-40)

#### Bottom 20 mm 107.3 mm (0.79") (4.22") THORLABS SM05 Internal 50 mm Thread (0.535"-40) +(1.97") 75 <sup>'</sup>mm Please refer to our website for (3.00") complete models and drawings.

Side

NEW

M4 (8-32) Tap

(1.57")



CHAPTERS V	

# Lab Supplies

# SECTIONS **Optics Supplies Fiber Supplies Electrical** Lab Tools

### **Safety and Blackout**

	Screws, Nuts, and Bolts	
19"	Rack Hardware	

Storage

ITEM #	BT600	BT610		
Wavelength Range	200 nm to 3.0 µm	400 nm to 2.5 μm		
Entrance Aperture	Ø0.433" (Ø11 mm)	Ø0.433" (Ø11 mm)		
Laser Type	CW	CW and Pulsed		
Max Average Power <sup>a</sup>	80 W <sup>b</sup>	30 W		
Max Average Power Density <sup>a</sup>	150 W/cm <sup>2</sup>	15 W/cm <sup>2</sup>		
Max Average Energy Density <sup>a</sup>	30 mJ/cm <sup>2</sup>	40 J/cm <sup>2 c</sup>		
Backscatter <sup>d</sup>	2 x 10 <sup>-4</sup>	9 x 10 <sup>-5</sup>		

Beam traps are common laser lab safety devices that are designed to absorb a laser beam's energy. To use, simply aim a beam into the Ø0.433" (Ø11.0 mm) entrance aperture. The trap has a ±5° acceptance angle to simplify the alignment process. One TR3 (TR75/M) post is included with each beam trap.

Dac	RSCatter				
) D	<i>c</i>			. 1 .1.	

a) Performance varies based on material variability. b) The housing temperature will be >100 °C for inputs >40 W.

c) @ 1064 nm, 10 ns, 10 Hz

d) Integrated backscatter based on fraction of power from the incident beam @ 633 nm.

ITEM #	<b>METRIC ITEM #</b>	\$		£		€		RMB	DESCRIPTION
BT600	BT600/M	\$ 229.50	£	165.24	€	199,67	¥	1,829.12	Beam Trap for CW Lasers
BT610	BT610/M	\$ 290.00	£	208.80	€	252,30	¥	2,311.30	Beam Trap for Pulsed Lasers

## **Beam Block**



Absorbs CW Beams up to 10 W

- Includes 3" (75 mm) Long Ø1/2" Post
- Large, 1.4" (35.6 mm) x 0.7" (17.8 mm) Target Area

The LB1 Beam Block is a compact solution, capable of absorbing CW laser beams up to 10 W. This beam block has a 1.4" x 0.7" (35.6 mm x 17.8 mm) aperture, which allows for larger beams and scattered light to be absorbed. An interchangeable Ø1/2" x 3" (Ø12.7 mm x 75 mm) TR post (see page 93) is included with each LB1.

LB1 LB1/M \$ 48.50 £ 34.92 € 42,20 ¥ 386.55 1.4" x 0.7" (35.6 mm x 17.8 mm) Beam Block	ITEM #	METRIC ITEM #	\$		£		€		RMB	DESCRIPTION
	LB1	LB1/M	\$ 48.50	£	34.92	€	42,20	¥	386.55	1.4" x 0.7" (35.6 mm x 17.8 mm) Beam Block

\*Imperial and Metric Compatible