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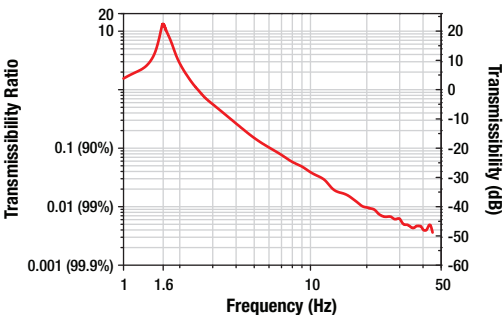
# ScienceDesk™ Frames: Active, Self-Leveling Vibration Isolation



Our Most Effective  
Vibration Isolation  
Frame

See Pages 33 - 34  
for Breadboards

ScienceDesk Transmissibility Plot



These frames are frequently used for imaging applications with sub-micron resolution. The large-area SDA150180 ScienceDesk frame is specifically designed for Multiphoton Microscopy applications where active vibration isolation is required for both the microscope and laser system. See page 1668 for more details.

Active ScienceDesk frames feature a transmissibility ratio of 0.04 at 10 Hz and provide the highest level of isolation available in this line of compact, portable, ergonomic workstations. The transmissibility ratio is the ratio of the acceleration transmitted to the isolated surface to the input acceleration the frame is subject to.

The active isolation system requires that a constant source of pressurized air (such as that provided by our PTA511 air compressor featured on page 72) be supplied to the pneumatic isolators. The system will adjust the pressure in each isolator to keep the optical breadboard surface level, even when the distribution of weight on the optical breadboard is changed.



PTA511  
(See Page 72)

## Specifications

- **Load Capacity (Including Breadboard):** 1545 lbs (700 kg)
- **Frame Size:** 195 mm Deeper and Wider than the Work Surface Size
- **Air Pressure (Max):** 80 psi (551 kPa)
- **Height Adjustment Range:** Leveling Feet:  $\pm 0.59"$  ( $\pm 15$  mm)
- **Finish:** Dark Gray
- **Self-Leveling Repeatability:**  $\pm 0.02"$  ( $\pm 0.5$  mm)
- **Isolation Type:** Active
- **Resonant Frequency**
  - Vertical: 1.5 Hz
  - Horizontal: 1.4 Hz
- **Transmissibility (at Resonance)**
  - Vertical: 13 dB
  - Horizontal: 21 dB
- **Transmissibility**
  - Vertical (@10 Hz): -29 dB (0.035 Transmissibility Ratio)
  - Horizontal (@10 Hz): -27 dB (0.043 Transmissibility Ratio)
- **Ergonomics:** In Accordance with BS EN 527 and BS EN 1335

\*Frames Rated at Full Load Capacity



## ScienceDesk Frames with Active, Self-Leveling Vibration Isolation

ITEM #	\$	£	€	RMB	ACCEPTED BREADBOARD SIZE	FRAME WEIGHT*
SDA7590	\$ 2,500.00	£ 1,800.00	€ 2,175.00	¥ 19,925.00	3' x 2.5' (900 mm x 750 mm)	160 lbs (72.5 kg)
SDA75120	\$ 2,525.00	£ 1,818.00	€ 2,196.75	¥ 20,124.25	4' x 2.5' (1200 mm x 750 mm)	167 lbs (76 kg)
SDA90120	\$ 2,550.00	£ 1,836.00	€ 2,218.50	¥ 20,323.50	4' x 3' (1200 mm x 900 mm)	176 lbs (80 kg)
SDA150180	\$ 4,261.00	£ 3,067.92	€ 3,707.07	¥ 33,960.17	6' x 5' (1800 mm x 1500 mm)	319 lbs (145 kg)

\*The weights given are for the frames only and do not include packaging. Please contact your local sales office for a quotation including shipping.