

# TS.150 / LP

THE TABLE TOP SYSTEM

Low Power Technology

ACTIVE ANTIVIBRATION SOLUTIONS



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Frequency	0.7 - 300 Hz (active)
Load capacity	0 - 150 kg
Dimensions	400 x 450 x 78.5 mm <sup>3</sup>



This compact state-of-the-art dynamic vibration isolation table achieves better isolation performance than most other comparable vibration damping systems. Ready-to-use on a plug-and-switch basis, the TS-150/LP now has been setting the standards for an excellent performing and easy-to-handle vibration isolation solution. Mainly used with Atomic Force Microscopy in the lab, the TS-150/LP acts also as carryon luggage to make on-site demonstrations successful even in an unknown or rough environment (e.g. exhibition ground).

Available also with drilled top plates with holes in metric or non-metric grid.

The isolation of the TS-Series begins at 0.7Hz, increasing rapidly to 40db beyond 10Hz. The lack of any low frequency resonance means much better performance than with most common passive air damping approaches. The inherent stiffness of the TS systems imparts excellent directional and positional stability. The outstanding performance of the TS-Series includes all six translational and rotational vibration modes.

The precise automatic height adjustment mechanism stabilizes the top plate at an optimized working level even after major changes of load. A remote control allows the isolation to be switched "ON" and "OFF" externally.

## Key Applications

- Laser Scanning Microscopy
- Scanning Probe Microscopy (AFM,STM)
- Scanning Near-Field Optical Microscopy (SNOM)
- Interferometry
- Metrology / Profilometry
- Micro & Nano Hardness Tester
- Nano Indentation
- Nano Lithography
- Ultrathin Film Applications
- Analytical Balances
- Bio-Physical Measurements
- Cryogenics
- Quantum Technology
- Single Molecule Investigations
- Cell Micro Injection
- Patch Clamp
- IVF Techniques
- and many more!

# TS.150/LP

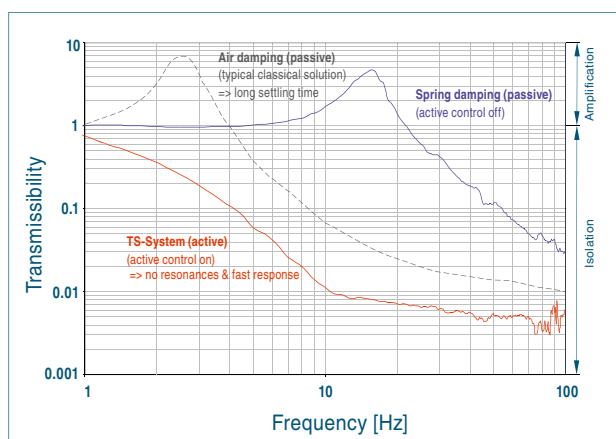
## ACTIVE ANTIVIBRATION SOLUTIONS

The TS-150/LP is combining proven technical excellence with elegant and user friendly design

### Advantages active vs. passive

- small size
- no air required
- no set-up time
- lack of any low frequency resonance
- inherently stiff (500x greater than that of a 1Hz passive isolator)
- rapid recovery time from shock (<10ms)
- includes all six translational and rotational vibration modes
- superior to any passive system

### Transmissibility Curve



### Technical Specifications

Isolation	Dynamic 0.7 Hz to 300 Hz, purely passive beyond 300Hz
Transmissibility	See transmission curve above Above 10 Hz transmissibility <0.01 (-40dB)
Maximum Load	0 - 150 kg
Size	400 x 450 x 78.5 mm
Weight	17.5 kg
Electrical	Safety class 1
Power consumption	Typically 10 W, 20W during load adjustment
Input voltage	115-230 V AC $\pm$ 10%, 50-60 Hz
Normal environmental conditions	Protection class IP20
Temperature range	5 °C - 40 °C, relative humidity 10-90 % (5-30 °C) / 10-60 % (30-40 °C)
Application	Indoor, altitude up to 2000 m (6500 ft)
Table Top	
Size	400 x 450 mm
Material	Damped aluminium sandwich construction 16mm thick Also available with tapped M6 on 25mm, stainless steel or customised



TS-150/LP front view



TS-Workstation:  
built-in active antivibration system



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