

TS.300LT

THE NEW GENERATION

ACTIVE ANTIVIBRATION SOLUTIONS



SCIENTIFIC INSTRUMENTS

Frequency	0,7 – 1000 Hz
Load capacity	0 – max. 120 kg
Dimensions	600 x 800 x 105 mm



The TS 300-LT is designed as a large area supporting table top damping system. Ideally suited for high sensitive applications which require more than one instrument on a common top plate (e.g. laser + microscope). A forthcoming version of the TS 300 will be able to carry loads up to 225 kg and 300 kg. The TS 300-LT should be used with a stable support frame (available on request).

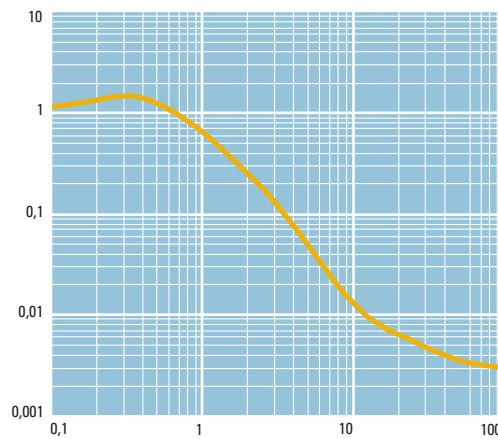
Inertial feedback is used via newly developed transducers to provide isolation from building vibrations, but also from vibration sources, placed on the system itself. No support media, like compressed air required. The new, precise automatic height adjustment mechanism stabilizes the top plate at an optimized working level even after major changes of load. Active isolation mode can be switched "ON" and "OFF" externally by a remote control (e.g. inside an acoustic enclosure).

Key Applications

- Scanning Probe Microscopy
- Scanning Near-Field Optical Microscopy
- Confocal Laser Scanning Microscopy
- Interferometry
- Metrology / Profilometry
- Nano Indentation
- Nano Lithography
- Ultrathin Film Applications
- Analytical Balances
- Bio-Physical Measurement
 - Single Molecule Investigations
 - Cell Micro Injection
 - Patch Clamp
 - IVF Techniques

The TS 300-LT is combining proven technical excellence with elegant and user friendly design

Transmissibility Curve (z)



TS 300-LT

- The isolation of the TS 300-LT begins at 0,7 Hz, increasing rapidly to 40 dB beyond 10 Hz
- The lack of any low frequency resonance means much better performance than with common passive damping approaches
- The inherent stiffness of the TS 300-LT imparts excellent directional + positional stability
- The outstanding isolation performance of the TS 300-LT includes all six translational and rotational vibration modes

Technical Specifications	
Isolation	Dynamic 0.7Hz to 1kHz, purely passive beyond 1kHz
Transmissibility	See attached curve. Above 10 Hz transmissibility <0.01 (-40dB)
Maximum Load	120 kg
Size	600 x 800 x 105 mm (W x D x H)
Self-Weight	48 kg
Electrical	
Safety class	1
Power Consumption	Typically 10 W, maximum 50 W (70 VA)
Input Voltage	115 - 230 V AC \pm 10%, 50 - 60 Hz
Normal Environmental Conditions	
Protection Class	IP 20
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 (6.500 ft)
Table Top	
Size	600 x 800 mm (W x D)
Material	Damped aluminium sandwich construction 22 mm thick*



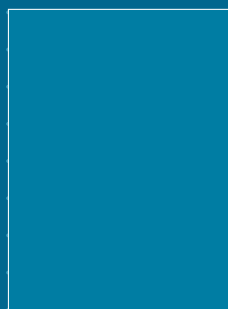
Front view



Side view



Top view



*Also available with aluminium top plate, tapped M6 on 25 mm centres.