

TS.300/LP

THE TABLE TOP SYSTEM

Low Power Technology

ACTIVE ANTIVIBRATION SOLUTIONS



SCIENTIFIC INSTRUMENTS

| | |
|---------------|---------------------------------|
| Frequency | 0.7 - 300 Hz (active) |
| Load capacity | 0 - 300 kg (0 - 120 kg) |
| Dimensions | 600 x 800 x 120 mm ³ |



This compact state-of-the-art dynamic vibration isolation table achieves better isolation performance than most other comparable vibration damping systems.

The TS-300/LP 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).

The TS-300/LP comes in two different versions: TS-300-LT/LP and TS-300/LP. The light version TS-300-LT/LP is well suited to carry loads up to 120 kg and the TS-300/LP up to 300 kg. The TS-300-LT/LP should be used with a stable support frame (available on request).

Available also with drilled top plates with holes in metric and 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.300/LP

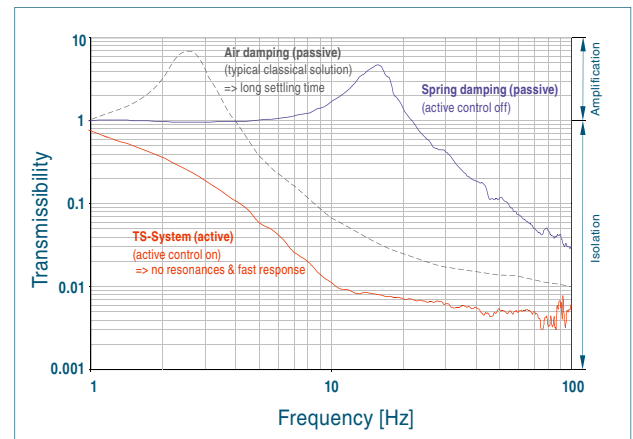
The TS-300/LP is combining proven technical excellence with elegant and user friendly design

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

ACTIVE ANTIVIBRATION SOLUTIONS

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 - 300 kg (Also available as TS-300LT/LP for loads up to 120 kg) |
| Size | 600 x 800 x 120 mm ³ |
| Weight | 53.0 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 | 600 x 800 mm ² |
| Material | Damped aluminium sandwich construction 16mm thick Also available with tapped M6 on 25mm, stainless steel or customised |



TS-300/LP front view



TS-Workstation:
built-in active antivibration system



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