Hot Disk®

TPS 3500

Hot Disk Thermal Constants Analyser

www.hotdiskinstruments.com

Thermal Constants Analyser

TPS 3500

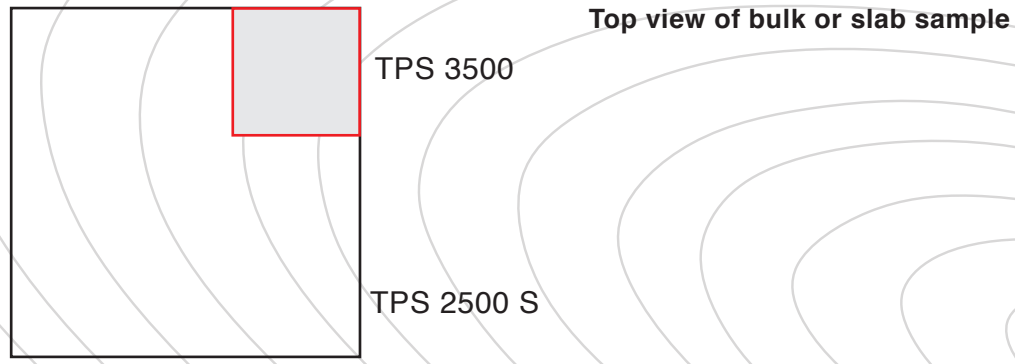
The new Hot Disk TPS 3500 is the ideal instrument for testing thermal conductivity, thermal diffusivity and specific heat of small and high-conducting samples. The capabilities of the TPS 3500 go well beyond those of any other Hot Disk instrument to date. This thanks to its high sampling rate, allowing minimal samples to be tested, while the instrument retains the documented precision of all TPS machines.

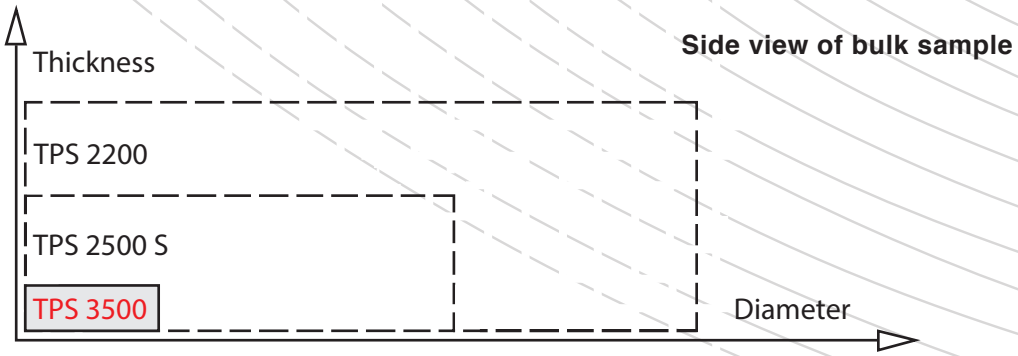
In addition, the TPS 3500 is a general purpose R&D instrument capable of analysing thermal transport properties of any solid or liquid. Solids suitable for TPS 3500 testing can be dense, porous or in powder form, isotropic or anisotropic, conducting or insulating, transparent or opaque. Liquids can be thick and sticky, low viscosity solvents or anything in between.

As a badge of reliability the new TPS 3500 meets ISO 22007-2 and utilizes Hot Disk's classic double spiral sensors for maximum accuracy. All this is achieved without the use of contact fluids, light-absorbing sample surfaces or fixed sample geometries.

Each Hot Disk TPS 3500 is tailored to application specifications and can be paired with a selection of temperature control accessories. To ensure optimal performance, software is continuously updated. Optional accessories are available for rapid acquisition.

Relative minimum sample dimensions as determined by measurement time





For further information please visit our homepage: www.hotdiskinstruments.com

THERMAL CONSTANTS ANALYSER

TPS 3500

Hot Disk TPS 3500

Thermal Conductivity	0.005 to 1800 W/m/K.
Thermal Diffusivity	0.01 to 1200 mm^2/s.
Specific Heat Capacity	Up to 5 MJ/m^3K.
Measurement Time	0.1 to 1280 seconds.
Reproducibility	Typically better than 1%.
Accuracy	Better than 5 % (thermal conductivity).
Temperature Range	-235 °C to 1000 °C.
Core Instrument	Ambient
With Furnace	Ambient to 750 °C (1000 °C oxygen free).
With Circulator	-35 °C to 200 °C.
Power Requirements	Adjusted to the line voltage in the region of use.
Smallest Sample Dimensions as Determined by Sensor Size	0.5 mm x 2 mm diameter or square for bulk testing. 0.042 mm x 8 mm diameter or square for slab testing. 5 mm x 2.5 mm diameter or square for one-dimensional testing. 0.01 mm x 22 mm diameter or square for thin-film testing.
Largest Sample Size	Unlimited.
Sensor Types Available	All Kapton sensors. All Mica sensors. All Teflon sensors.

Meets ISO Standard 22007-2.

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