

SM150A

Adapter used for a better measuring experience with SM150L/H

GENERAL

SM150A is an optional accessory for SM150L and SM150H instruments. The corpus of the adapter consists of the tube (diameter of 38 mm) with a good thermal conductivity. Its upper part is in touch with water which is thermostated by small thermostat with Peltier cells. Its lower part ends inside the pick-up unit of the instrument. The measuring pot with the sample is moving inside the tube by means of a small engine. Thanks to the excellent thermal conductivity of the tube the sample is found in the area with constant temperature and thus the thermal dependency of susceptibility is eliminated.

The adapter is equipped with Pt thermometer, which measures temperature in the bottom part of the tube. It is attached to the instrument by screws and connected to PC via USB interface. It is powered by USB.

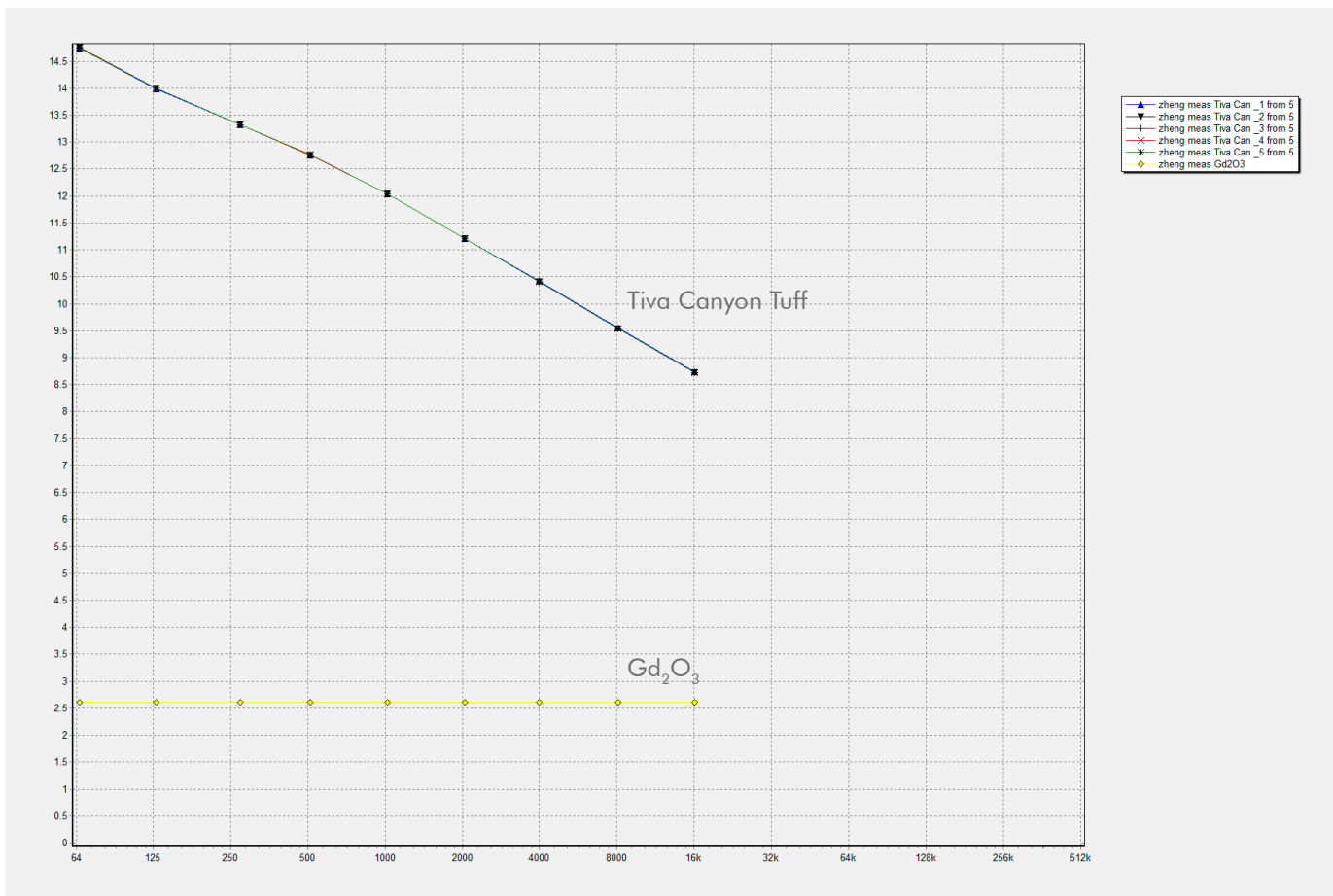
All parameters (such as measuring frequency, strength of the field, length of measuring cycle, time for insertion and removal of the sample) can be comfortably set from the SW that is supplied with the adapter. Moreover, the SW is capable of doing some statistical calculations and drawing the graph of the dependency of magnetic susceptibility on the frequency.



FEATURES

- works with SM150L and SM150H instruments
- automatically inserts and removes the sample
- software driven control of the adapter
- possibility to create own measuring profile
- switching measuring frequencies and strengths of the field
- performs long fully automatic measuring sequence
- thermal stabilisation of the sample and measuring area

Picture depicts the frequency dependency of Gd_2O_3 and Tiva Canyon Tuff at temperature 25deg C. Tiva Canyon Tuff was measured 5 times during the night. Graphs overlap.



Picture depicts the detail in area of 250 Hz.

