



Tuning Fork Sensor Controller

The new NanoAndMore **Tuning Fork Sensor Controller** is an electronic device to control the self-oscillation of a quartz tuning fork based sensor and to measure its frequency.

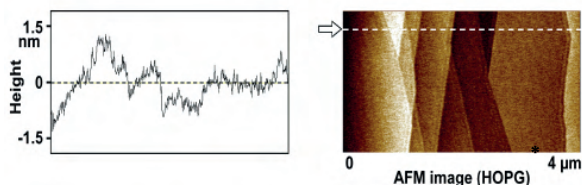
The new NanoAndMore **Tuning Fork Sensor Controller** offers our customers the convenience of a ready to use electronic device to control and to measure the frequency of the NANOSENSORS™ Akiyama-Probe and other self-oscillating quartz tuning fork-based sensors without having to build the whole Akiyama-Probe set-up from scratch.

Quartz Tuning Forks are highly useful for various sensing applications such as Scanning Probe Microscopy (SPM), Atomic Force Microscopy (AFM), viscosity/vacuum measurements, Bio/chemical sensing, etc.



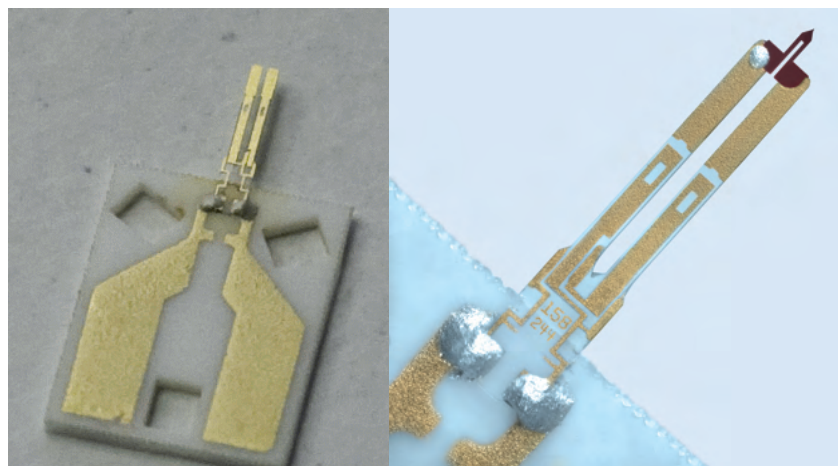
Working principle: The **Tuning Fork Sensor Controller** excites the self-oscillation of quartz tuning-fork-based sensors at their resonance frequency. As soon as an external force or an environmental change influences the tuning fork, the self-oscillation frequency changes. By measuring the frequency shift, quantitative information of the analyte is obtained.

Please visit www.nanoandmore.com for more information.



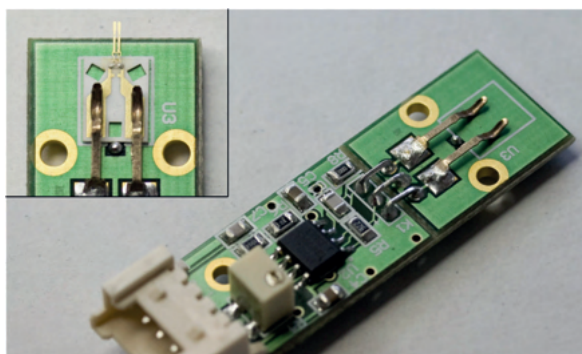
MAIN FEATURES

- Control the self-oscillation of the Akiyama-Probe and other quartz tuning-fork-based sensors
- Measure the frequency of the Akiyama-Probe and other quartz tuning-fork-based sensors
- Optimized for the operation of the Akiyama-Probe in AFM applications
- Delivered with one Preamplifier board and one sensor holder ready for operation
- Delivered with a set of three tuning forks attached onto a support chip for testing
- Ready to use unit out of the box



NanoAndMore tuning fork sensor

NANOSENSORS™ Akiyama-Probe



TECHNICAL DATA

- Self-oscillation frequency range: 10 kHz – 100 kHz
- Frequency measurement range
28 kHz ~ 60 kHz (± 1 kHz variations in different units)
- Demodulation frequency range
(i) ± 405 Hz (100 mHz resolution, ± 30 Hz variations in different units)
(ii) ± 2077 Hz (510 mHz resolution, ± 150 Hz variations in different units)
- Demodulation bandwidth: 400 Hz
- Required power supply: 100-230V~ 50/60Hz 4VA