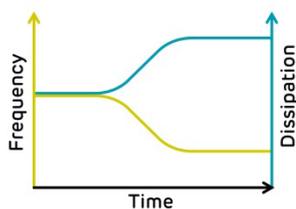


The qCell T series are highly advanced quartz crystal microbalances with damping/dissipation (QCM-D) monitoring. With unmatched signal stability, the devices are optimally suited for real time investigation of biofilm formation, cell cultures, assessment of viscosity, or development of immunological, hematological, biological and electrochemical assays.



qCell T features:

Sophisticated Technology



Frequency & Dissipation/Damping Monitoring

As one of the most advanced QCM-D producers in the world, 3T provides instruments that capture both the frequency and dissipation/damping of the oscillation with high resolution in real time. This provides information on the mass as well as the rigidity of the attached layer.

Patented Chip Design

The resonant quartz sensor and flow cell are designed for maximum baseline sensitivity. The unique sensor is attached on a mylar sheet with unique serial number. The flow cell locks and seals the QCM-D sensor without asserting any pressure or tension on the quartz, as is not the case with other currently available QCM-D instruments.



Innovative Referencing System

The unique referencing system captures the initial frequency and dissipation values of every new quartz chip. The values are saved together with the serial number of the chip. Any further changes made either within the flow cell or outside will be recognized by the instrument.



Precise Temperature & Automated Fluid Control

The flow cell and sample holder are integrated on the same precise Peltier temperature control block. This ensures that there are virtually no temperature differences, eliminating any temperature related frequency drifts and impacts on temperature dependent chemical and biochemical kinetics.

Diverse & Dedicated Applications

Diverse Applications with Various Sensor Types

The instruments offered by 3T analytik are optimally suited for investigation of biofilms and cell cultures, assessment of viscosity, or development of immunological, hematological, biological assays. Integration of potentiostat and special electrodes further enables simultaneous electrochemistry and QCM-D measurements. Besides the standard gold coating, 3T provides a variety of other coatings e.g. other metal coatings, SiO₂, different polymers and special organic coatings.

Dedicated to Whole Blood Measurements

Due to the flow cell design optimized for whole blood and blood compatible, non-activating fluid contacting polymer surfaces, the qCell T achieves outstanding performance with whole blood samples. The qCell T is the only QCM-D instrument that has been used to investigate medical and scientific problems in the field of whole blood analysis.



Easy Handling

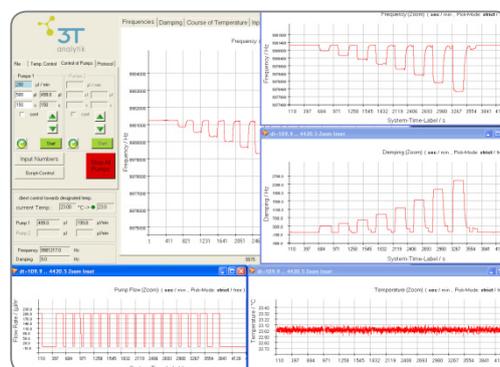


Convenient Operation Control Arranged in Compact and Elegant Instrument Design

3T focuses always on the operational ease and very short time to result. The patented design of the quartz sensor guarantees easy insertion and yet precise positioning of the quartz chip. After simply mounting the flow cell unit, the instrument is ready to measure. The easy control button (ECB) and on board display enable the user to gain quick access and rapid operation of the device without starting PC software. Plus, the device takes less space than a 13 inch laptop.

User-friendly Software

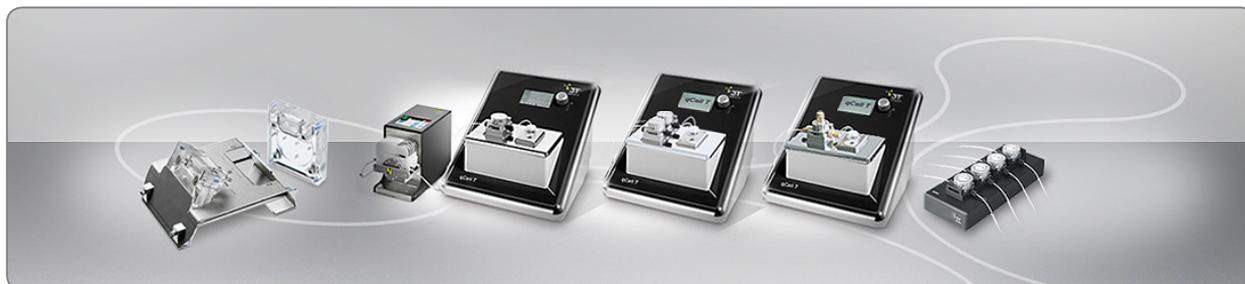
Automatization of measurements control is made comfortable by using the embedded software package. The qCell T comes with a complete software suite for fully automated instrument control, signal acquisition, real time display, processing and data storage. Individual panels display frequency, damping (dissipation), temperature and pump flow profiles. Online protocol commenting, coordinate display by pick point function, scripts for programming flow rates, patterns and repetitive cycles can be added and edited by the operator. Data export to qGraph Viewer, Excel™, Origin™ and other processing software is supported.



Advanced Connectivity

The qCell T utilizes Ethernet connection which can be set up with an IP address. When tied into a network, the unit and data acquisition can be operated remotely which is important for measurements requiring long run times.

**We at 3T offer different QCM-D instrument versions to exactly fit your specific needs.
We look forward to hearing from you!**



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