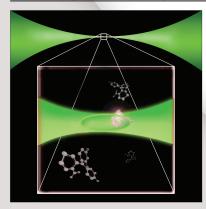


Introducing the Quantum FCS Spectrometer

Fluorescence Correlation Spectroscopy (FCS) is a powerful single-molecule detection technique that has been costly and difficult to understand... Until Now!

FCS: High-sensitivity Measurements of Molecular Interactions



FCS: Single Molecule Detection **Using Confocal Optics**

The QuantumXpertTM is optimized for measurement of biologically and biochemically relevant particles using FCS. FCS provides information about the molecular size, concentration, and interactions of fluorescently-labeled particles in solution.

Use FCS to measure:

- > Protein protein interactions
- Protein nucleic acid interactions
- Nucleic acid hybridization
- ➤ Ligand receptor binding
- ➤ Enzyme kinetics
- Conformational changes

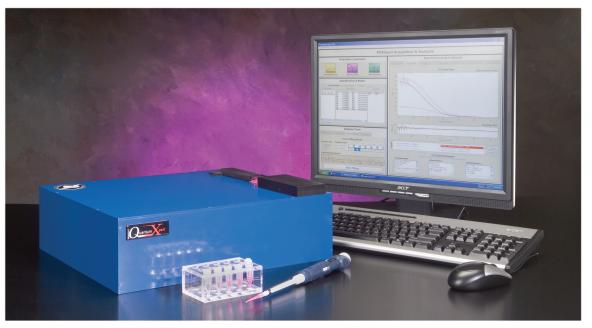
The QuantumXpert™: Fluorescence Correlation Spectroscopy Simplified

Due to its **fully integrated** design, the QuantumXpert[™] incorporates all optical and electronic components, eliminating the bulk, hassle, and maintenance of other FCS instruments. Its compact design makes the QuantumXpert[™] a convenient addition to any lab.

The Convenient QuantumXpert™:

- ➤ Fits on any lab bench
- ➤ Does not require a fluorescence microscope
- ➤ Does not require a dark room or isolation table
- ➤ Does not require any manual hardware adjustments
- ➤ Eliminates maintenance: No alignment whatsoever!
- Designed for portability
- ➤ Controlled by simple, intuitive software for acquisition and analysis at the push of a button!

FCS no longer requires extensive technical expertise. Our FCSXpert™ software simplifies FCS data acquisition and analysis: We put the Xpert in the Box!





Versatile Hardware Configuration

- ➤ Simultaneous 491/532 nm laser source (2 x 20mW)
- ➤ Computer-adjustable excitation intensity (0 2.9 OD)
- Simultaneous three-channel, single-photon acquisition of:
 - 3 Autocorrelation functions
 - 3 Cross-correlation functions
 - 3 Photon counting histograms
- ➤ Optional features:
 - Automated sample changer
 - Temperature control (Ambient 40°C)

Comprehensive Software Package

- > Real-time display of single and batch acquisition
- > Single and batch correction algorithms for:
 - Background fluorescence
 - Channel cross-talk
- ➤ Single and batch curve fitting methods for:
 - Fluorescence correlation data
 - Photon counting histograms
- ➤ Customizable data display and export options

For more information:

Sensor Technologies LLC Park Nine West 910 Boston Turnpike Shrewsbury, MA 01545

Phone: 508-842-0432 Fax: 508-842-1894

Web: www.QuantumXpert.com E-mail: info@quantumxpert.com Quote: sales@quantumxpert.com

www.QuantumXpert.com www.QuantumXpert.com

Introducing the

pert" FCS Spectrometer



required expensive equipment and technical expertise. Correlation Spectroscopy In the past, Fluorescence

Now, FCS is:

Affordable: We dramatically simplified the optics.

Easy to use: We put the Xpert in the box!

Sensor Technologies LLC Park Nine West 910 Boston Turnpike Shrewsbury, MA 01545

