

Single-molecule fluorescence spectrometer

For smFRET and FCS

Key features

- Compact instrument for benchtop use
- Fully automated calibration of lasers and alignment
- Real-time analysis and publication-ready plots
- Expandable design with easy upgrade to high throughput version (for well plate acquisition)

Key applications

- Complement drug development workflows with single-molecule insights
- Quantify direct and higher order biomolecular interactions
- Easily obtain K_d values and complex stoichiometries
- Analyse nanoparticles and EVs, even in complex media

1 Continuous wave lasers

30-40 mW
2 colour: 520 and 638 nm
3 colour: 450, 520 and 638 nm

2 Benchtop operation

- Compact footprint
- 65 x 65 x 35 cm (wdh)
- Operates in ambient light



3 No laser lab required

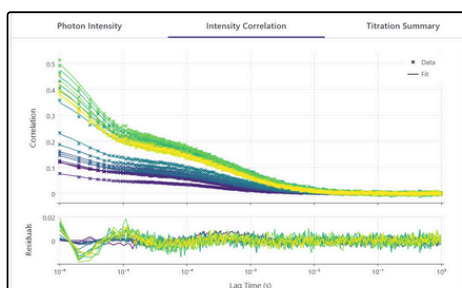
Class 1 laser product

4 No specialist equipment required

No need for an optical table or vibrational isolation/damping

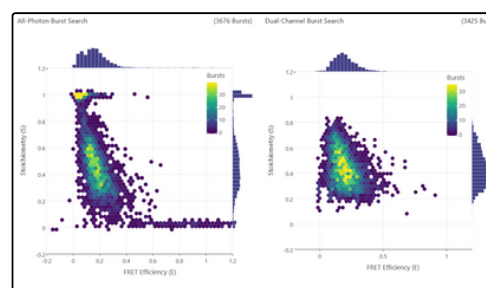
5 Expandable design

Seamless upgrade to the high-throughput model



6 Intuitive software

Real-time visualisation of data and publication ready smFRET/FCS plots at the push of a button



	Laser operation	Acquisition	Analysis	Data export and cloud storage
smFRET	2-colour alternating laser excitation (ALEX) – on the microsecond timescale	Live time trace and ES histogram with live background estimation and occupancy (to ensure true single-molecule data acquisition from the first measurement)	Full background correction, all photon and dual channel burst searching, ES and 1D FRET histograms Calculate FRET efficiencies and nanoscale distances through our supplied protocols	HDF5 file format with full metadata, compatible with many standard open-source analysis packages in the field
F(C)CS	1 or 2 colour continuous wave laser excitation	Live time traces, number and brightness information, and correlation curves allow visual inspection of data in real-time during the experiment	Generate FC(C)S correlation curves, diffusion times and binding constants with our comprehensive desktop software	Comprehensive, cloud-based data archiving. Access your experimental data from anywhere - never lose a file again

Want to know more?

Explore a range of applications and book a demo at excitinginstruments.com

