creoptix sensors

# WAVEcontrol

Fast, intuitive, automated

# Workflow-based design offering both flexibility and functionality

**Every step from assay setup over data evaluation to report writing is simplified with an intuitive design that mirrors the way you work**

1.

### Design your experiment

Smart design for your experiment before you begin, with our built-in optimizer to simulate data

2.

### Set-up your experiment

Use our wizards for a fast and efficient experimental set-up, or manually edit for full flexibility. WAVE goodbye to serial dilutions and DMSO corrections with RAPID Kinetics™

3.

### Evaluate your data

Apply our predefined models to evaluate the results of your experiments. Adjustments can be fully fine-tuned. Evaluate your data with traditional (global) fit or let Direct Kinetics evaluate the data for you

4.

### Report your data

Get access to raw data and export your results in a customizable PDF or Word format with just a few clicks

## Simple and improved user interface

### New Wizards

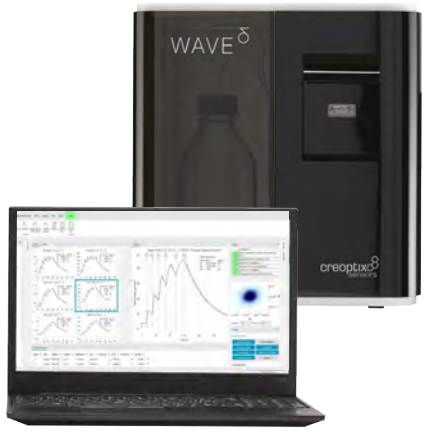
pH scouting, support for new WAVEchip types, and RAPID Kinetics™ wizards to increase throughput and time-to-result

### Smoother Set-Up

Copy/paste and import from Excel files for large screens. Drag and drop for full flexibility

### Improved Evaluation

More models for regeneration-free kinetics and automated evaluation with Direct Kinetics (1-click evaluation tool)




## License models

Every WAVE system comes with two (2) software licenses. As long as the device is under warranty, both software licenses fall under the subscription model. Once the instrument is out-of-warranty, both software licenses become perpetual unless a subscription model is purchased.

### Perpetual license

- Pay once, use as long as you want
- Includes software updates with stability and usability improvements
- Excludes software version upgrades

### Subscription model

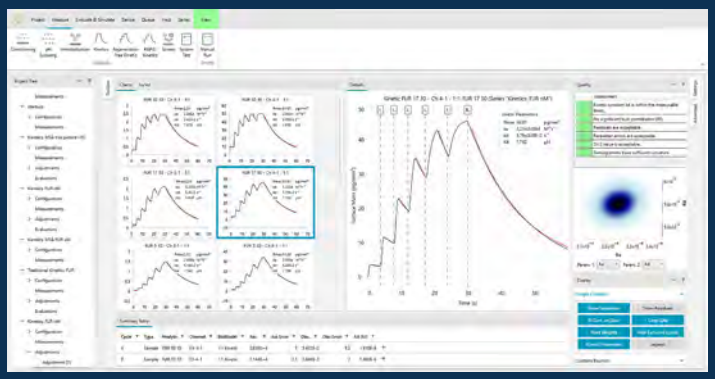
- Enjoy all options for a full year
- Includes software updates with stability and usability improvements
- Includes software version upgrades

# RAPID Kinetics™ – A new way of measuring kinetics

## Kinetics and affinity from a single injection

### Full kinetics from a single well

RAPID stands for Repeated Analyte Pulses of Increasing Duration. This new way of measuring kinetics allows you to probe the interaction of interest using injections from a single well, with short pulses of increasing duration.

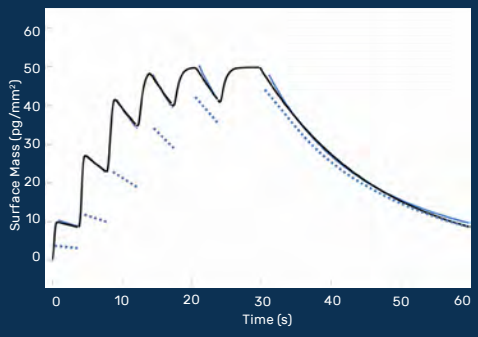


Short pulses of increasing duration but same concentration are used for determining full kinetics.

### Immune to refractive index disturbances

RAPID Kinetics™ allows you to overcome a fundamental challenge of refractive index-based sensors: liquid refractive index disturbances that need correction. This is especially useful when dealing with molecules that significantly alter the refractive index of the buffers used.

Using RAPID Kinetics™, only the dissociation part of the binding curves is needed to extract both association and dissociation rates.




A full kinetic characterization can be performed using only the dissociation parts of the binding curve. Higher association rates result in characteristic upwards shifts of the dissociation parts and viceversa. The dotted line represents an interaction with the same dissociation rate, but 3x lower association rate than the interaction represented by the solid line.

### Increase your throughput
WAVE goodbye to serial dilutions

### Screen faster
Combine primary and secondary screens in one run

### Speed up assay development
Find the right density, assess non-specific binding and find out quickly whether your protein is still active quickly

### Skip DMSO correction
Affinity and kinetic rates are not affected by bulk refractive index differences

### Save time and money
Reduce sample and reagent consumption

### Reduce time-to-market
Speed up drug development process

# Direct Kinetics – Automated, objective way of evaluating data

### Global fitting

Global fitting is the most commonly used data evaluation function in real time biomolecular interaction analysis. Based on non-linear least-squares fitting, this method finds rates and affinity constants to fit curves as close as possible to the actual data.

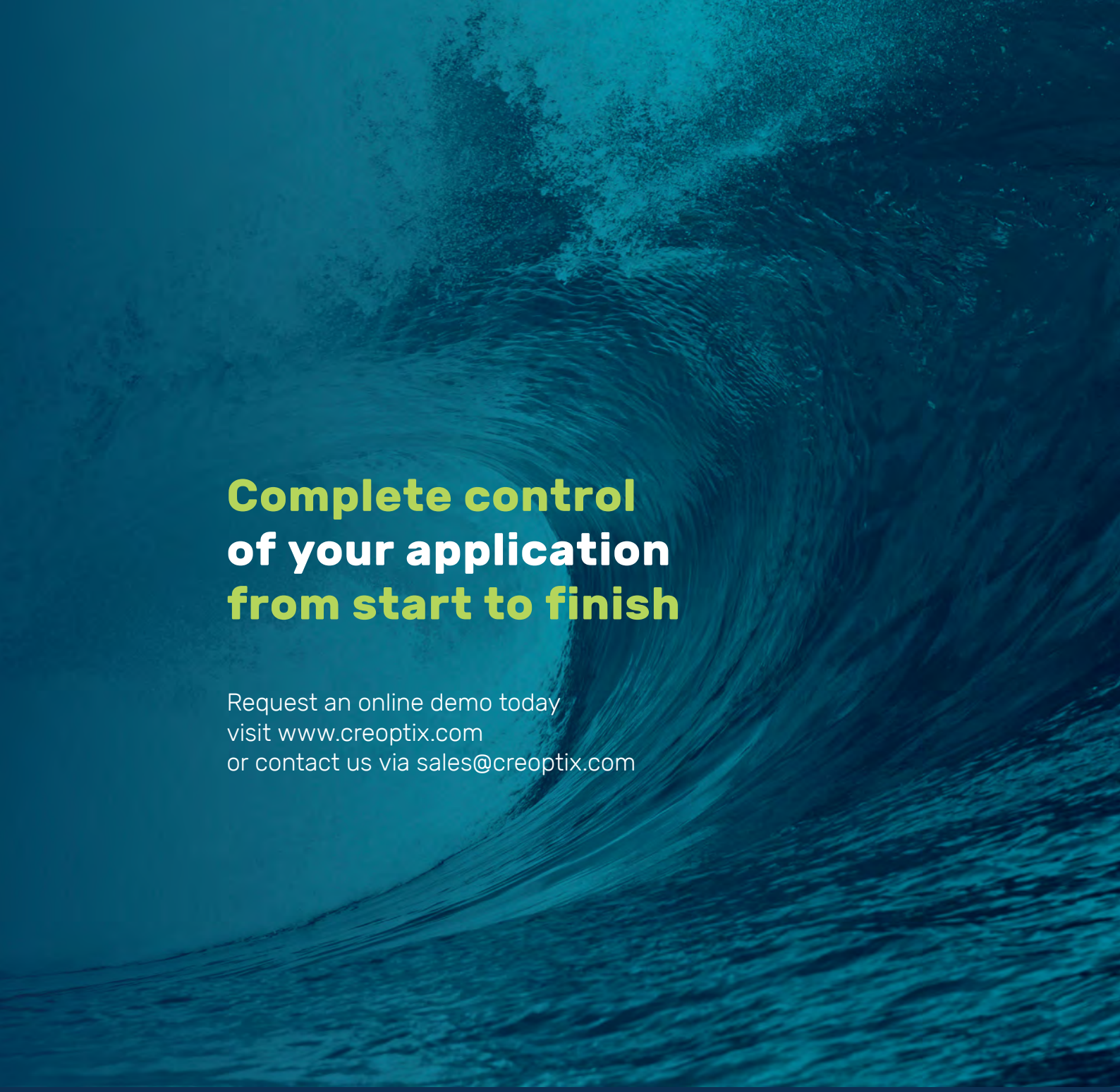
Globel fitting needs human intervention for obtaining best results and is driven by “what looks good”. A well-trained scientist would need 3-5 minutes to analyze one interaction.

With Direct Kinetics, instead of optimizing the visuals, the error on the determined parameters is minimized. Dozens of interactions are automatically analyzed in 3-5 minutes.

WAVEcontrol 4.0 has a shiny new user interface. A confidence region plot (right side of image) shows you the reproducibility of your results.

### Evidence-based estimation

At Creoptix, we focus on the evidence supported by your biomolecular interaction data instead. With our brand new Direct Kinetics tool, we rely on robust statistical estimators to deliver an automated calculation of your kinetic parameters with a mathematically sound error analysis.



# Complete control of your application from start to finish

Request an online demo today
visit www.creoptix.com
or contact us via sales@creoptix.com

To make the most out of your WAVEsystem,
contact our team at support@creoptix.com

label-free data
like you've never seen before

Creoptix AG | Zugerstrasse 76 | 8820 Wädenswil | Switzerland (HQ)
Creoptix Inc | 60 Prescott Street | Worcester MA-01605 | USA
www.creoptix.com | +41 44 533 26 60