

Surface Plasmon Resonance  
*Reimagined by Reichert*

# Reichert4SPR

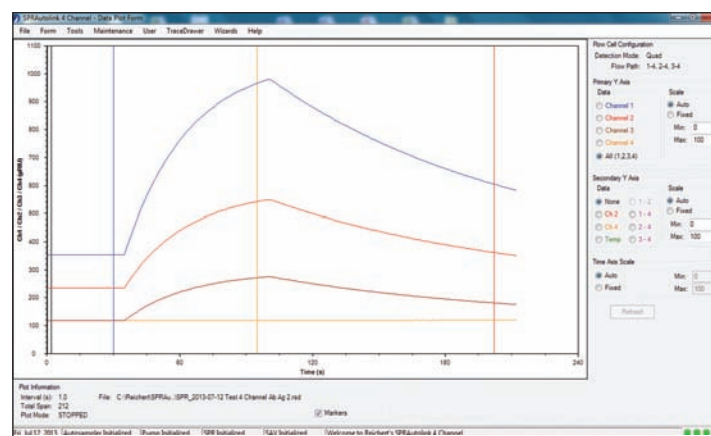
Take it for a test drive,  
see how it handles the curve



# Reichert4SPR NEW 4-Channel SPR System

Reichert Life Sciences introduces **Reichert4SPR**, the new 4-channel Surface Plasmon Resonance (SPR) system for label-free, real time investigation of biomolecular interactions. Unmatched sensitivity and baseline stability make **Reichert4SPR** the ideal system for both macromolecular and small molecule kinetic or concentration determination experiments.

The success of the **Reichert4SPR** 4-channel system is the culmination of Reichert's fifteen years of developing flexible, affordable, and extremely sensitive SPR systems. **Reichert4SPR** features the latest advancements in optics, image sensing, electronics and software.



## Robust fluid handling system

- Run aggregates, precipitates or lysate samples
- Fluidics tubing is easy to access and easy to change
- Fewer clogs, fewer failed experiments

## Reichert4SPR provides more value than the leading competitor

- Easy-to-access fluidics lowers operating and maintenance costs
- Reichert4SPR's five year total cost of ownership is 30% lower than leading competitor.

## Service and support from a team of expert application scientists ensure your success

- In-depth training
- Method development and consulting
- Maintenance and support



Nanoliter volume flow cell  
fluidic pathways



Flow cell body is pre-assembled with all  
fluidic connections in place.

## Reichert4SPR, extreme sensitivity and baseline stability

- +/- 0.05  $\mu$ RIU rms noise – perfect for analysis of small molecules or very low concentrations of larger biomolecules. High sensitivity reduces the required amount of sample and produces results even if a large portion of a protein population is inactive or denatured.
- Drift is less than 0.1  $\mu$ RIU per minute ensuring quality data fits.
- Determine picomolar concentrations and equilibrium dissociation constants.

## Intuitive software allows for easy set-up and streamlined workflow

- Software designed with you in mind and how you run your experiment.
- Seamless data analysis software with multiple binding models and easy data comparison.
- Built in quality checks



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## Specifications

### Technical Information

Measurement Channels	Four
Sample Loading	Autosampler. Up to 768 samples
Sample Volume	50 $\mu$ L to 4500 $\mu$ L (depends on installed loop volume)
Buffer Degasser	Built in
Temperature Range	10°C below ambient to 70°C
Sample Storage	4°C or ambient temperature
21 CFR Part 11	Compliant

### Measurement Sensitivity

Baseline Noise	0.05 $\mu$ RIU RMS
Baseline Drift	< 0.1 $\mu$ RIU/min
Minimum Molecular Weight Detection	< 100 Daltons

### Typical Kinetic and Equilibrium Constant Ranges

Association Rate Constant	10 <sup>3</sup> to 10 <sup>8</sup> M <sup>-1</sup> s <sup>-1</sup>
Dissociation Rate Constant	10 <sup>-1</sup> to 10 <sup>-6</sup> s <sup>-1</sup>
Equilibrium Dissociation Constant	mM to pM