

# Reichert4SPR

The more flexible, more powerful,  
more affordable 4-channel SPR



## An SPR leader since 1997

Reichert® is a name you can trust. We've been working with SPR technology since 1997, selling to some of the top names in academics and private industry. We've been in business for more than 140 years, and are now part of AMETEK® Ultra Precision Technologies, a division of AMETEK Inc., which is a leading global manufacturer of electronic instruments and electromechanical devices. With Reichert, you'll get personal service and attention, including:

- A product demo in your lab
- In-person set-up and training
- Ongoing support and troubleshooting

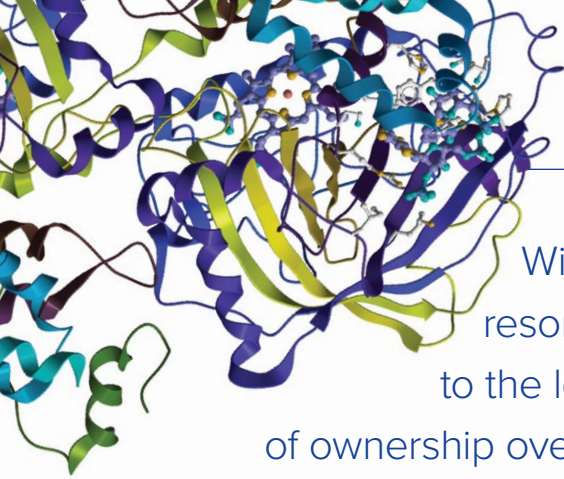


## About SPR

Surface plasmon resonance (SPR) is a technique that lets you investigate biomolecular interactions in real-time. With SPR, you can:

- Quickly determine if there is a biomolecular interaction with your protein or other target molecule
- Answer questions about the binding properties including:
  - How fast do the molecules associate and dissociate?
  - How strong is the interaction (affinity)?
  - How specific is it?
- Study a variety of interactions including, but not limited to, protein-protein binding and protein-small molecule binding
- Perform SPR on crude samples (using Reichert's accessible tubing)
- Work with native proteins (SPR is a label-free technique that lets you save time)
- Get more data with greater accuracy compared to other techniques





With Reichert, you get a four-channel surface plasmon resonance (SPR) system that provides results equivalent to the leading competitor, with a 30-70% lower total cost of ownership over five years. The Reichert4SPR System pushes the limits of detection and sensitivity for label-free biomolecular interaction analysis, which is one reason why it's the top choice for leading universities, academic facilities and biotech startups around the world.

### Only Reichert gives you

- More flexibility (analyze crude samples, interface with other equipment)
- Easy-to-use software with guided workflows
- The best performance-to-cost ratio for individual labs
- A proven SPR leader since 1997

To see how Reichert can help advance your research and lead to new breakthroughs, contact us today to schedule a demo in your lab.

**SAVE  
\$125k  
OVER 5 YEARS**

### Save Up To 40% With Reichert — The Affordable Choice

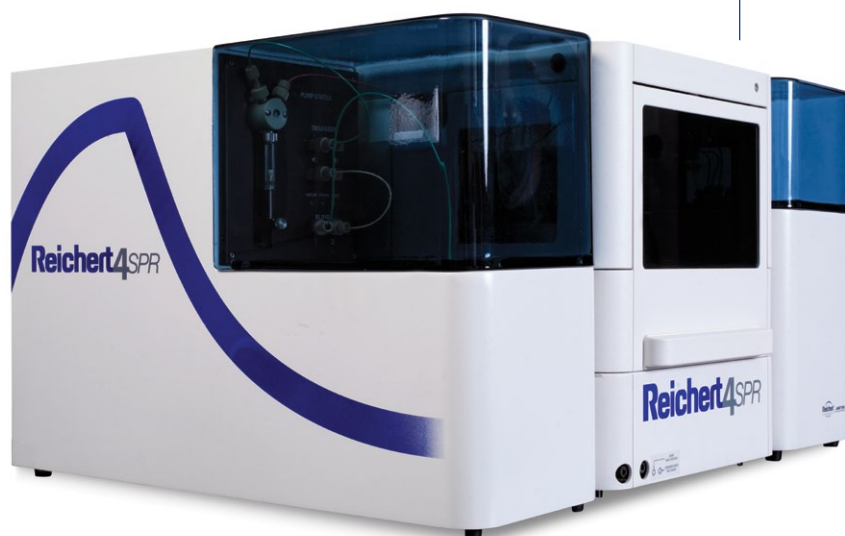
Spend less money on equipment and maintenance — and more on your research — when you choose Reichert. In fact, the typical research lab can save approximately \$25,000 per year, per system, compared to the leading competitor. That's \$125,000 over the next five years — valuable funds that you can use for your staff and other critical research needs.

#### LOWER OPERATING COSTS

A typical lab can use 75–200 sensor chips each year, which is why you should always ask about the cost of chips when you're considering an SPR system. At Reichert, our high-quality chips are often less than half the price of our competitors, so you can run more experiments without worrying about out-of-control costs.

#### NO COSTLY SERVICE CONTRACT REQUIRED

Other SPR companies make you purchase a service contract, which can easily cost up to \$150,000 over the course of five years. With the Reichert4SPR System, all of the typical parts that need maintenance are easy for you to access (and service) yourself. In fact, the amount you'll save on maintenance over five years is nearly the amount you would spend on acquiring a brand new instrument. Of course, we do offer service contracts, if you would rather let us handle the regular maintenance.



## Open System = High-Quality Data, More Flexibility

### GET HIGH-QUALITY, PUBLICATION-READY DATA

The Reichert4SPR System offers significant advantages for researchers and scientists. Whether you're working with simple solutions or more challenging assays, you can count on Reichert to offer:

- High sensitivity — study protein interactions with low molecular weight (down to approximately 100 Da) compounds; enhanced sensitivity also makes the Reichert4SPR System ideal for:
  - High quality kinetic analysis
  - Affinity measurements for weak or strong interactions (ranging from 1 mM to 1 pM)
  - Precise determination of thermodynamic parameters
  - Accurate concentration analysis
- Industry-leading low drift (0.1  $\mu$ RIU/min)
- Extremely low noise (0.05  $\mu$ RIU rms)
- Faster baseline stability — the Reichert4SPR System stabilizes 2x-3x faster than the competition, due to our streamlined fluidics
- High sample capacity (up to 768 samples per run)

### OPEN SYSTEM = MORE CONTROL, MORE FLEXIBILITY, MORE TIME FOR RESEARCH

Other SPR systems only allow for limited access to critical parts. But with Reichert, everything you need to access is right out in the open, which makes your life — and your research — much easier.

### EASY TO CHANGE AS YOUR RESEARCH EVOLVES

The Reichert4SPR System is designed to be as flexible as possible, from changeable tubes to an easily accessible flow cell — without costly upgrades and changes.

### 5-MINUTE TUBING CHANGES

With Reichert, you can change the tubing whenever you want in just minutes — without having to wait around for a service call. All Reichert SPR systems are designed to use low-cost, off-the-shelf HPLC fittings and tubing that are easily accessible to you and your staff. With Reichert, you can:

- Change the tubing to different sizes
- Accommodate a wide range of sample compositions (from pure soluble solutions to cell lysates) with varying viscosities

- Run crude samples without having to purify them — saving you time and providing even greater flexibility — without risking costly delays and service calls; crude samples include:

- Whole cells
- Viruses
- Lysates
- Serum
- Aggregates

- Stop worrying about clogs — if a tube is damaged, blocked or clogged, you can replace it yourself in just a few minutes, using standard tubing



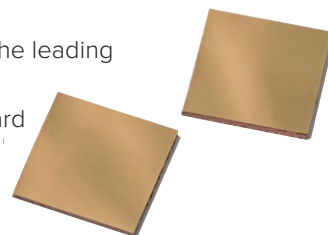
### EASY-TO-CLEAN FLOW CELLS

While some competitors charge nearly \$10,000 to replace a flow cell cartridge, our flow cells are easy to clean (and, if necessary, change) yourself. We offer standard and specialized flow cells; please see [www.reichertspr.com](http://www.reichertspr.com) for a complete list.



### A WIDE VARIETY OF STANDARD AND SPECIALIZED CHIPS

Our sensor chips are equivalent to the leading competitor's chips, at a significantly lower cost. Reichert offers all standard chips; specialized sensor chips are also available. Please see [www.reichertspr.com](http://www.reichertspr.com) for a complete list.



### FOUR CHANNELS FOR GREATER EFFICIENCY AND THROUGHPUT

The Reichert4SPR System is a four-channel system, which means you can speed up your method development by running up to three experiments at one time. With four channels, you have the flexibility to run:

- 3 experimental channels with one reference channel (for testing of an analyte binding to multiple targets, for example)
- 2 experimental channels with separate references
- 4 channels or 2 pairs at once
- 2 pairs at different times

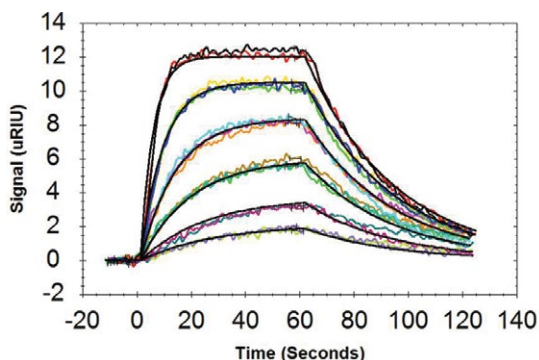
## Software with Guided Workflows

Our software is designed for the way you work. Simply set up a few key parameters for your experiment, and you're ready to go. The streamlined software guides the user through the entire experiment, from selection to immobilization to scale-up of large screening runs, so you can quickly develop and execute experiments (including couple and capture experiments).

### REICHERT OFFERS:

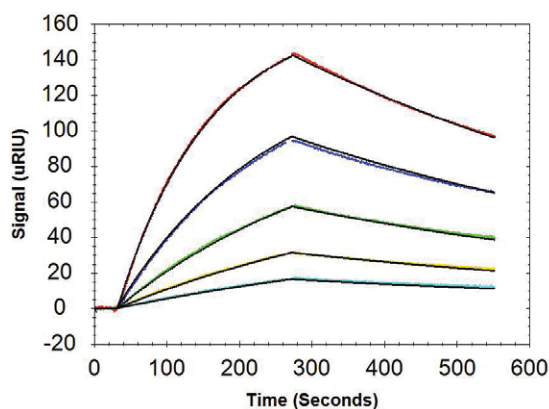
- Fast experiment setup – even for novice users; very little training is required
- Guided workflow for all experiment types (couple and capture)
- Streamlined and versatile experiment setup to accommodate varying experience levels
- Flexible data analysis with multiple binding models
- Full qualification and validation support (GxP and 21CFR Part 11 regulatory compliance – no need to buy additional software)
- Access controls to ensure data integrity
- Configurable authorization levels for creating and running experiments, options and data export
- Log and audit trails that track modifications and maintain a complete history

With intuitive screens and faster runs, you'll spend less time on set-up and manual entry, and more time on what matters to you.



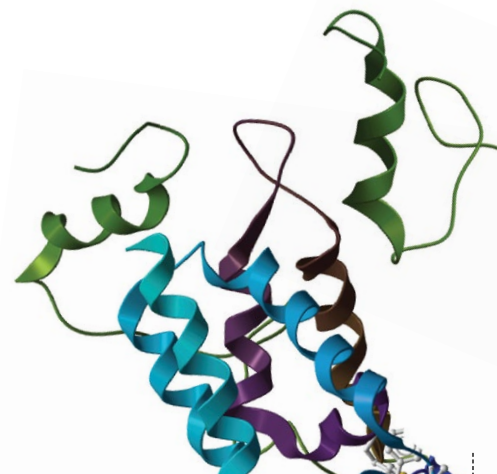
#### SMALL MOLECULE BINDING

4-CBS (MW 201 Da) binding to immobilized carbonic anhydrase



#### ANTIBODY-ANTIGEN BINDING

HSA binding to immobilized Anti-HSA





## Specifications

### TECHNICAL INFORMATION

Measurement Channels	Four
Sample Loading	Autosampler. Up to 768 samples
Injection Volume	10 µL to 4,500 µL (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 uRIU (RMS)
Baseline Drift	< 0.1 uRIU/min
Minimum Molecular Weight Detection	< 100 Daltons

### TYPICAL KINETIC AND EQUILIBRIUM CONSTANT RANGES

Association Rate Constant	$10^3$ to $10^8$ M <sup>-1</sup> s <sup>-1</sup>
Dissociation Rate Constant	$10^{-1}$ to $10^{-6}$ s <sup>-1</sup>
Equilibrium Dissociation Constant	$10^{-3}$ to $10^{-12}$ M

**See for yourself how the Reichert4SPR System can help you make new discoveries.  
Contact us today to set up a hands-on demonstration in your lab.**



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