

Reichert® SPR

FLEXIBILITY • PERFORMANCE • VALUE

2, 3, and 4-Channel Surface Plasmon Resonance Systems

Reichert®
AMETEK

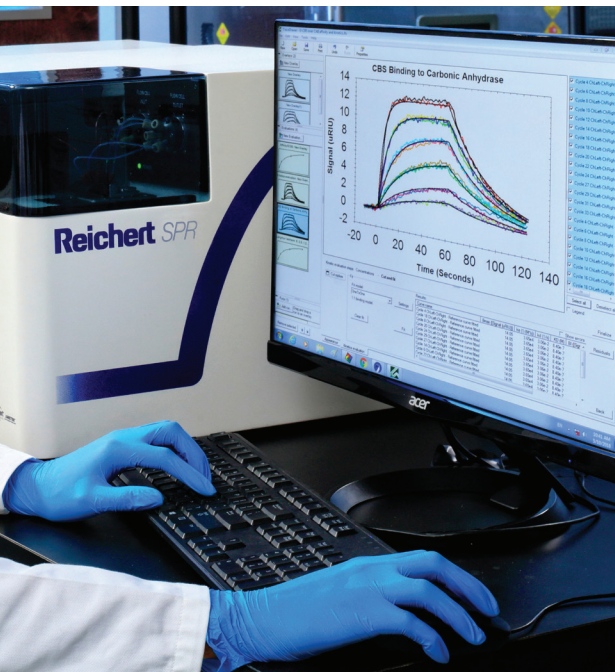




Discover the Difference of Reichert® SPR!

Reichert has a long history of innovation in scientific instruments, dating back to the first American-made microscope in 1838, building on this legacy with **Surface Plasmon Resonance (SPR)** systems. Since entering the label-free biosensor market in 1997, Reichert has focused on providing affordable, user-friendly SPR solutions for researchers in both academic and industry sectors. Reichert SPR systems are known for high-quality data generation and flexible functionality, making them a valuable tool for studying biomolecular interactions.

Compare SPR to other techniques, and you'll quickly see why leading labs choose Reichert.



WHAT IS SPR?

SPR is a proven, label-free biosensor technique for studying interactions between all classes of biomolecules to understand biochemical mechanisms in real-time, providing unmatched versatility and data quality.

With Reichert SPR, you can answer the following questions:

- How quickly do molecules interact?
- How strong is the interaction?
- How specific is the interaction?
- What are the concentrations of the interactants?
- Are environmental factors involved?

WHY IS SPR IMPORTANT?

SPR provides richer, more accurate data about biomolecular interactions compared to other biosensing techniques. It offers a single platform to measure interaction rates, affinity, and can answer other diverse questions.

Reichert SPR is the gold standard for analyzing biomolecules, providing:

- Measurement of high-quality kinetic parameters
- Real-time data acquisition
- Label-free analysis
- Faster, automated experiments

WHAT ARE THE APPLICATIONS FOR SPR?

From Drug Molecules to Whole Cells

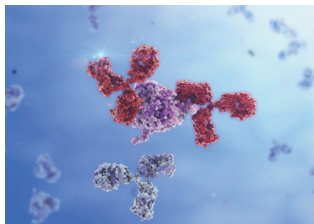
Reichert SPR systems study interactions across a vast spectrum of scientific fields and tackle even crude samples and undiluted serum with ease. This flexibility, coupled with high sensitivity and stability, makes Reichert SPR a powerhouse in the life sciences and materials research disciplines.



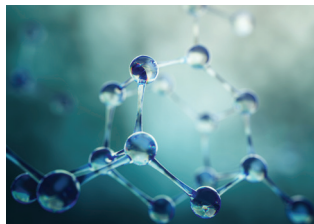
ANTIBODY DEVELOPMENT



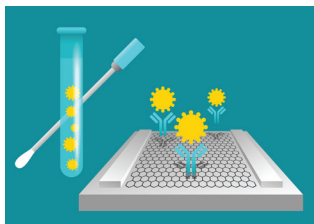
BIOPHARMACEUTICALS



BIOMOLECULAR INTERACTIONS



DRUG DISCOVERY



BIOSENSORS



MATERIAL CHARACTERIZATION

WHAT IS THE REICHERT SPR ADVANTAGE?

Focus on Research, Not Equipment Costs

Breakthrough research deserves efficient tools. Reichert systems deliver exceptional performance with significantly lower operating costs. Invest more in your science and achieve groundbreaking results. Choose Reichert and free up valuable resources for your lab.

Lower Equipment Costs

Reichert SPR Systems can cost up to 30% less than leading competitors for similar capabilities. This translates to significant savings, especially for labs with limited budgets.

Lower Operating Costs

Don't let ongoing costs chip away at your research budget. Every SPR system requires sensor chips for protein coupling, and labs typically use 75-200 chips annually. That's why Reichert SPR Systems prioritize affordability. Our high-quality chips are significantly less expensive as compared to the equivalent competitor offering, allowing you to run more experiments and maximize your research output.

Designed for User-Friendly Maintenance

Unlike our competitors who lock you into expensive service contracts costing up to \$150,000 over five years, Reichert SPR Systems empower you with self-service. Our systems are designed for user-friendly maintenance. Commonly maintained parts are easily accessible, so you can handle routine upkeep yourself and save money. Of course, we understand that some may prefer professional care. That's why we also offer optional service contracts for your peace of mind.

Reichert® SPR Systems

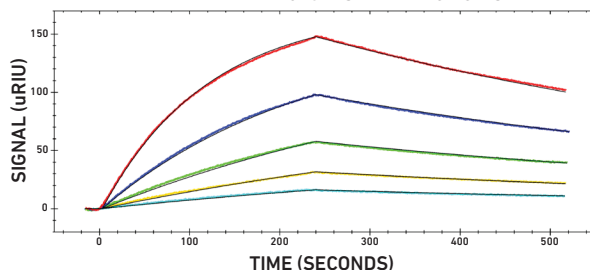
Flexibility, Performance, Value

Reichert's SPR systems deliver unmatched sensitivity and detection limits for label-free, real-time analysis of biomolecular interactions, all at a significantly lower cost than the competition.

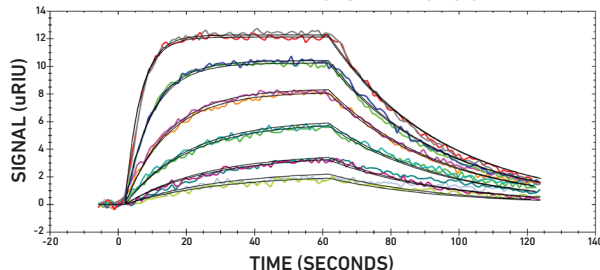
Choose Reichert SPR for:

- High-quality, publication-ready data
- Unmatched flexibility
- Lower equipment costs
- Lower operating costs
- No service contract required
- The best performance-to-cost ratio for individual labs
- A proven SPR leader since 1997

DATA EXAMPLE 1: anti-HSA BINDING TO HSA



DATA EXAMPLE 2: 4-CBS BINDING TO CAII



Reichert® 4SPR

4-CHANNEL SURFACE PLASMON RESONANCE SYSTEM

More Flexible, More Powerful, and More Affordable

Unleash groundbreaking research with exceptional value. Reichert 4SPR combines unmatched data quality with a dramatically lower cost of ownership. Save 30-70% over 5 years compared to similar systems and reinvest in your scientific breakthroughs.

Reichert 4SPR Advantages:

- Analyze crude samples and seamlessly integrate with other techniques for a comprehensive workflow
- Intuitive software with guided workflows simplifies operation for researchers of all experience levels
- The best performance-to-cost ratio for individual labs
- 4 channels for greater efficiency and throughput
- Ideal choice for biotech labs and core facilities



Reichert® 3SPR

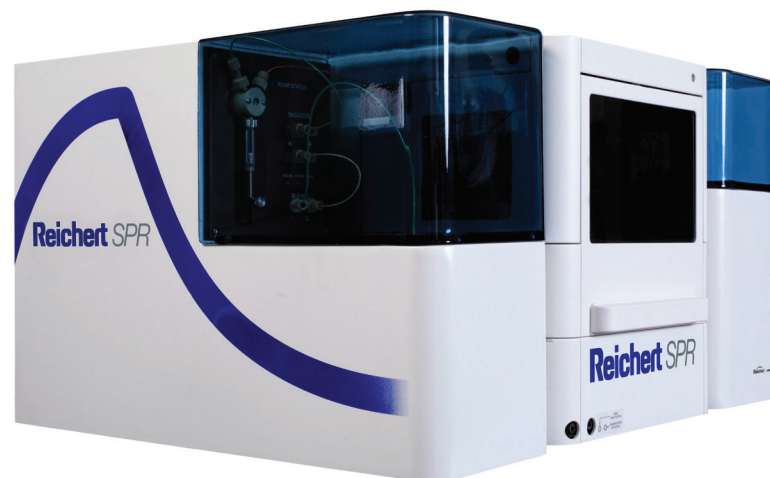
3-CHANNEL SURFACE PLASMON RESONANCE SYSTEM

The Best Compromise Between Throughput and Cost

The Reichert 3SPR streamlines your workflow and maximizes research output. This innovative system boasts a dual analysis and reference channel design, allowing you to immobilize different molecules for more data while saving 20% compared to competitor systems with lower throughput.

Reichert 3SPR Advantages:

- Robust fluidics - handle crude samples and whole cells
- 3 channels for expedited method development and data output
- Increased sensitivity with the best performance-to-cost ratio for individual labs and core facilities



Reichert® 2SPR

2-CHANNEL SURFACE PLASMON RESONANCE SYSTEM

The Most Affordable High-Performance 2-Channel SPR

The powerful Reichert 2SPR delivers industry-leading sensitivity and detection, helping you achieve groundbreaking results. Trusted by leading universities and institutions worldwide, Reichert 2SPR empowers researchers like you to unlock the secrets of biomolecular interactions with exceptional performance and affordability.

Reichert 2SPR Advantages:

- Enhanced Flexibility - run crude samples and integrate to other techniques
- The most sensitive, flexible, and affordable 2-channel available
- The best performance-to-cost ratio for academic labs

Components, Consumables, and Accessories

SENSOR CHIPS

Select What's Right for Your Experiment

Reichert sensor chips are specifically chosen to provide optimum results when used with any Reichert SPR instrument (2, 3, or 4-channel). Whether you are running a traditional biomolecular interaction analysis experiment or a more specialized assay, we have the sensor chips you need.

- Affordable prices let you explore more interactions
- Protocols provided for each chip
- Academic discounts available
- Custom coatings available



Sensor Chip Types:

- Plain Gold
- Planar Surface with mixed SAM Carboxyl Surface
- Carboxymethyl Dextran
- Nickel Nitrilotriacetic Acid Surface, low and high density
- Polycarboxylate Hydrogel
- Protein A, low and high density
- Streptavidin, low and high density
- NeutrAvidin Planar mSAM Surface
- Hydrophobic Planar Alkyl Surface
- 100% Carboxyl Planar

VIALS AND CAPS

Crucial for Sample Preparation

Choose from our high-quality, resealable caps and compatible glass or plastic vials.

TUBING

Optimize Your SPR with the Right Tubing

Choose from a range of tubing materials and diameters to enhance your experiments.

FLOW CELLS

Expand or Replace

Reichert SPR's open flow cell system lets you swap flow cells for diverse experiments, minimizing downtime and costs with easy cleaning and maintenance.

Specialized Flow Cells:



QUARTZ WINDOW



MALDI MASS SPECTROMETRY



ELECTROCHEMICAL

Standard Flow Cells:



2-CHANNEL



3-CHANNEL



4-CHANNEL



SR7500DC, LEGACY 2SPR

PREVENTATIVE MAINTENANCE KIT

Avoid Downtime and Keep Your Instrument Running at Its Best

Maintain productivity with this convenient kit that includes the wear items that are recommended to replace after every 3 years of usage.



Specifications

Technical Information

MEASUREMENT CHANNELS	Two, Three, Four
SAMPLE LOADING	Autosampler, up to 768 samples
INJECTION VOLUME	10 μ L to 4,500 μ 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 uRIU (RMS)
BASELINE DRIFT	< 0.1 uRIU/min
MINIMUM MOLECULAR WEIGHT DETECTION	< 100 Daltons

Typical Kinetic & Equilibrium Constant Ranges

ASSOCIATION RATE CONSTANT	10^3 to 10^8 $M^{-1} s^{-1}$
DISSOCIATION RATE CONSTANT	10^{-3} to $10^{-6} s^{-1}$
EQUILIBRIUM DISSOCIATION CONSTANT	10^{-3} to 10^{-12} M

High-Quality Data, Simplified, Every Time.

Unlock the secrets of biomolecular interactions with Reichert SPR systems. Designed for affordability and ease-of-use, Reichert SPR empowers researchers of all experience levels to achieve high-quality data. Its unmatched flexibility allows you to tackle a wide range of experiments, from basic affinity measurements to complex kinetic analyses. With Reichert SPR, you gain the confidence to explore the intricate world of biomolecular interactions and make groundbreaking discoveries.



Scan here to learn more or visit:
reichertspr.com



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