
Ultra Sensitive Surface Plasmon Resonance (SPR) Instrument with Built-in Versatility

BI-2000



BI-2000 utilizes a unique detection technology that delivers high sensitivity ($< 10^{-4}$ degrees) with superior flexibility. It enables users to measure a binding constant down to a few pM^{-1} . The system is specially developed to meet many application requirements with various interchangeable analysis modules such as the Flow Injection Analysis Module for DNA sequencing, protein/protein interaction, ligand/receptor recognition, and drug development applications. Additionally, the Electrochemical and EC-DualFlow™ Analysis Modules for electrochemical SPR studies may be easily implemented (not included with the system).

Key Features

- Wide dynamic range and high sensitivity for both large and small molecules (< 100 Daltons)
- Broad response time for slow (hours) and fast (< 1 ms) kinetic processes
- Innovative design provides users with maximum flexibility
- Two channel detection for background and reference subtraction
- Compatible with electrochemistry applications
- Single and serial fluidic modes - more experimental options, enhanced data quality

System Specification

Base station: built-in power supply with differential detection electronics.

Control system: precision data acquisition system, control/analysis software with a PC computer.

Two Channel SPR detection module: covering SPR angle range for measuring SPR shift in aqueous buffer solution.

Manual valve system for two channel fluid handling: the injection valve comes with a zero-dead-volume loop for small volume samples.

Precision Syringe pump: two channel programmable syringe pump for uniform continuous flow. Flow rates range from 2 nL/min to 8 mL/min, depending upon the syringe size.

Included



Flow Injection Analysis Module

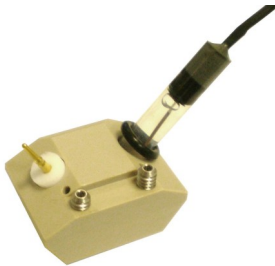
for two channel flow injection SPR research

Optional Accessories



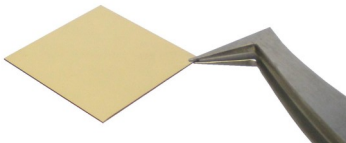
EC-DualFlow™ Analysis Module

for advanced two channel electrochemical (EC) SPR flow research.



Electrochemical Analysis Module

for electrochemical (EC) SPR research.



Gold Sensor Chips with high uniformity
for reproducible SPR research.
