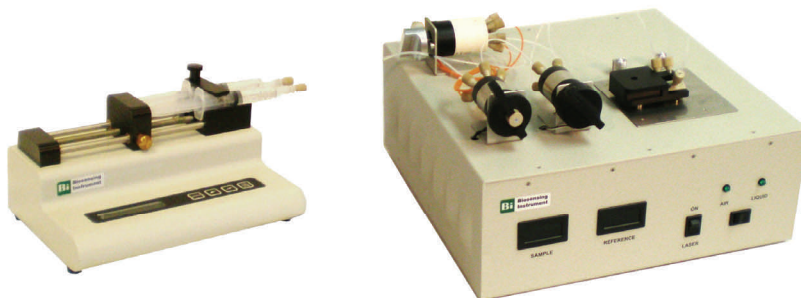

Ultra Sensitive Surface Plasmon Resonance (SPR) Instrument with Built-in Versatility

BI-2000



BI-2000 utilizes a unique detection technology that delivers superior flexibility with high sensitivity $< 10^{-4}$ degrees (rms). It enables users to measure a binding constant down to a few pM^{-1} . The system is specially developed to meet many application requirements. The system also provides a quick and easy setup with various cell modules such as the flow cell module for DNA sequencing, protein/protein interaction, ligand/receptor recognition, and drug development applications and the optional EC cell module (not included with the system) for electrochemical SPR analysis.

Key Features

- Wide dynamic range and high sensitivity for both large and small molecules (< 100 Daltons)
- Broad response time for slow (hours) and fast ($< \text{ms}$) kinetic processes
- Innovative design provides users with maximum flexibility
- Two channel detection for background and noise 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 module: covering SPR angle range for measuring SPR shift in aqueous buffer solution.

Manual valve system for two channel fluid handling: two-channel PEEK flow cell. The injection valves come with a zero-dead-volume loop for small volume samples.

Syringe pump module: programmable syringe pump with flow rates ranging from 2 nL/min to 8 mL/min, depending upon the syringe size.

Optional Accessories

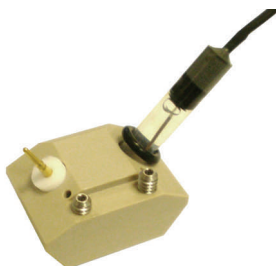
Flow injection cell made of PEEK.



Two Channel PDMS Gasket for single and serial flow analysis.



Electrochemical (EC) cell made of PEEK. It includes a Pt counter electrode, a Ag/AgCl reference electrode and a Teflon gasket for electrochemical SPR.



Gold sensor chips

