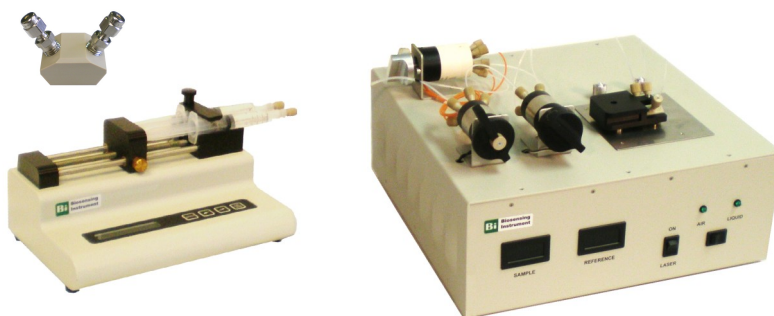

Ultra Sensitive Surface Plasmon Resonance (SPR) Instrument with Built-in Versatility

BI-2000G



The BI-2000G is developed for both liquid and gas phase SPR applications. It utilizes a unique detection technology that delivers high sensitivity ($< 10^{-4}$ degrees) with superior flexibility. The system provides quick and easy setup with its two analysis modules: (1) the Flow Injection Analysis Module for DNA sequencing, protein/protein interaction, ligand/receptor recognition, and drug development applications; and (2) the Gas Analysis Module for chemical vapor detection, gas chemical sensor research, and fundamental solid-gas interface studies. Other additional options include the EC-DualFlow™ and Electrochemical Analysis Modules for electrochemical SPR analysis .

Key Features

- SPR measurement in both aqueous buffer solution and gas/vapor phase
- Wide dynamic range and high sensitivity ($< 10^{-4}$ degrees)
- 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
- Single and dual channel flow modes - more experimental options, enhanced data quality
- Compatible with electrochemical applications

System Specification

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

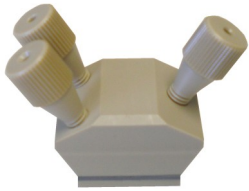
Control system: precision data acquisition system, control/analysis software with a PC computer.

Two Channel Liquid/Gas SPR detection module: covering SPR angle range for measuring SPR shift in both aqueous buffer solution and in air.

Manual valve system for two channel fluid handling: 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.



Gas Analysis Module

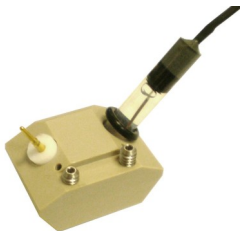
for gas and chemical vapor SPR research.

Optional Accessories



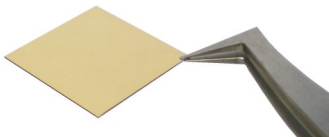
EC-DualFlow™ Analysis Module

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



Electrochemical Analysis Module

for electrochemical (EC) SPR research.



Gold Sensor Chips with high uniformity
for reproducible SPR research.