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



# BI-3000G

With **BI-DirectFlow™**

BI SPR instruments utilize a unique detection technology that deliver maximum flexibility with high sensitivity ( $< 10^{-5}$  degrees) and fast response times ( $< 0.5$  msec). The **BI-3000G** SPR instrument is equipped for liquid and gas/vapor phase SPR analysis and comes with **BI-DirectFlow™** technology, which enables precision sample delivery with near-zero dispersion. This system is designed for the study of ultra-fast kinetic interactions such as those from DNA sequencing, protein/protein interaction, ligand/receptor recognition, and drug development applications. Additionally, the instrument's open detection stage and auxiliary data ports facilitate its integration with ongoing research projects and other instruments (see **EC-DualFlow™** option for advanced two channel electrochemical SPR research).

### Key Features

- SPR measurement in both aqueous buffer solution and gas/vapor phase
- 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
- Semi-automated sample delivery with BI-DirectFlow™ for fast kinetics
- Two channel detection for background and reference subtraction
- Gas phase SPR applications
- Compatible with electrochemical SPR 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 air.

**Semi-automated sample delivery with BI-DirectFlow™ :** precision sample delivery with near-zero dispersion.

**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.

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## Included



### **BI-DirectFlow™ Analysis Module**

for advanced two channel ultra fast kinetics research.

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### **Gas Analysis Module**

for gas and chemical vapor SPR research.

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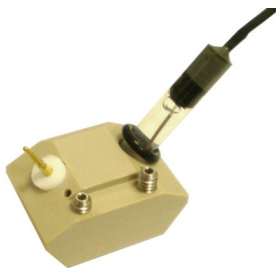
## Optional Accessories



### **EC-DualFlow™ Analysis Module**

for advanced two channel electrochemical SPR research.

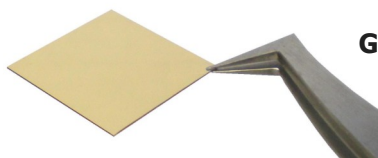
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### **Electrochemical (EC) Analysis Module**

for electrochemical SPR research.

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**Gold sensor chips** with high uniformity  
for reproducible SPR research.

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