

## OpenPlex

### Hardware configuration

The following technical specification\* sheet provides a summary of the OpenPlex instrument configuration, options and specifications.

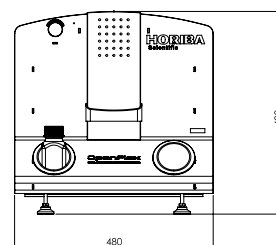
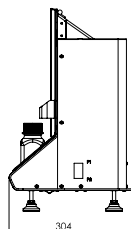
OpenPlex is the ideal solution for the development of label-free, multiplexed bioassay and biomolecule detection. It is highly versatile and is designed to be very easy to use. It is ideally suited for applications in biosensor development, pathogen detection, water monitoring, nanotechnology and surface characterization.

### OpenPlex - Flexible research platform for Surface Plasmon Resonance imaging

Sample type:	Proteins, peptides, DNA, serum (raw), cells, nanoparticles
Sample volume:	50-2000 $\mu\text{L}$ . Delivered with a 200 $\mu\text{L}$ sample loop
Sample concentration:	300 ng/mL (100-1000 kDa) to 10 $\mu\text{g/mL}$ (4-20 kDa)
Sample molecular weight:	$\geq 201$ Da
Detection limit:	10 $\text{pg/mm}^2$ (5 $\text{pg/mm}^2$ with 10-bit CCD camera)
Liquid refractive index range:	1.30-1.37
Light source:	High stability LED (810 nm)
Mirror:	Incident beam mirror system enables easy adjustment of incident beam angle ( $\pm$ arc min)
Detector:	CCD camera, IEEE 1394 Firewire, 8 bit, 752 x 582 pixels Optional: 10-bit CCD camera, 1392 x 1040 pixels
Optical lateral resolution:	50 $\mu\text{m}$
Flow system:	Direct flow cell connections for SPRi unit
Injection system:	6-port injection valve, manually controlled
Tubing:	PEEK tubing
Flow cell shape:	Hexagonal
Flow cell volume:	11 $\mu\text{L}$
Flow cell height:	70 $\mu\text{m}$

### Environment

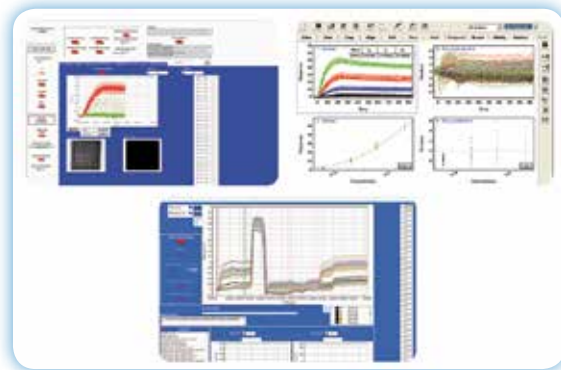
Weight:	13 kg (28.66 lbs)
Operating temperature:	15-28 $^{\circ}$ C
Voltage:	110/220 V 50-60 Hz



## SPRi Software suite

The OpenPlex is delivered with an intuitive software package to be used from measurement acquisition to analysis of the results and data reporting.

- ◆ SPRi-View: Intuitive instrument control software for ease-of-use.
- ◆ SPRi-Analysis: Quantitative analysis and rapid report generation to track all your experiments.
- ◆ ScrubberGen (optional software): Advanced analysis software to fit data and determine kinetic parameters.



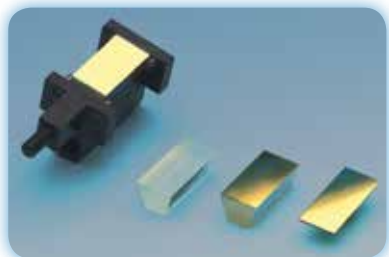
## Accessories

- ◆ 2-channel degasser
- ◆ Peristaltic pump
- ◆ External manual fluidic kit (tubing and connectors)
- ◆ Window flow cell (for fluorescence coupling)
- ◆ Cuvette cell (for electrochemistry coupling)

## Consumables and Reagents

### SPRi-Biochips™ and SPRi-Slides™

The sensor chips are available in bare gold or functionalised and ready-to-use with SAM or Dextran-based surface chemistries.



### SPRi reagents

The reagents are ready-to-use and include running buffers, blocking solutions, regeneration solutions, etc.



## Additional equipment for sample preparation

As part of the HORIBA Scientific SPRi platform, the spotting devices allow you to immobilize your molecules onto the sensor chips in a micro-array format. Direct contact spotting or microfluidic printing systems can fulfill all your application expectations.



\*Specifications are subject to change and HORIBA Jobin Yvon SAS reserves the right to alter specifications without notice. It is forbidden to copy from the contents of this leaflet in part or in full without the written permission of HORIBA Jobin Yvon SAS.



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