Technical specifications and characteristics					
	HORIBA OpenPlex	OWLS 210	Biacore X100	Biacore T200	EVA2.0
	www.sprimaging.com	www.owls-sensors.com	www.biacore.com	www.biacore.com	www.pcbiosensors.com
Detection	SDD sensor	Optical Waveguide	Surface Plasmon Resonance (SPR) sensor		Photonic Crystal Surface
technology	SFK SCHSOL	Lightmode Spectroscopy			Modes (PC SM) sensor
Working surface	Gold (Au)	metal oxides with high	Gold (Au)		Silica (SiO_2)
		RI (Ta_2O_5, TiO_2 etc.)			
Max adlayer thickness	$\sim 100\mathrm{nm}$	$\sim 1000{ m nm}$	100 nm (\simeq penetration depth of SP wave)		$\sim 1000\mathrm{nm}$
Flow rate range	(not specified)	0.1 to 30 000 µL/min	1 to 100 µL/min		50 to 1000 µL/min
Flow cell height	70 µm	100 to 800 μ m	50 µm	$40\mu\mathrm{m}$	50 to 100 μ m
Flow cell volume	11 µL	1.5 to 12 μ L	$0.05\mu\mathrm{L}$	0.06 µL	5 to 10 µL
Sample volume	50 to 2000 μ L (Delivered	20 to 500 µL	5 to 90 μL	2 to 350 μL	50 to 200 μL
	with 200μ L sample loop)				
Number of	3	1	2	4	1 to 12
flow cells					(registration channels)
time resolution	(not specified)	1 to 3 sec	(not specified)	(not specified)	0.1 to 10 sec
baseline	$3 \times 10^{-6} \mathrm{RIU}$	$3 \times 10^{-6} \mathrm{RIU}$	10^{-7} RIU ($\simeq 0.1$ RU)	$3 \times 10^{-8} \text{ RIU} (\simeq 0.03 \text{ RU}))$	$5 \times 10^{-8} \text{ RIU} / \sqrt{\text{Hz}}$
noise, δn_e					
baseline	10 pg/mm ² (optional 5 pg/mm ²)	10 pg/mm^2	0.2 pg/mm ²	0.06 pg/mm ²	$0.07 \ (pg/mm^2)/\sqrt{Hz}$
noise, δm_a					
baseline drift	(not specified)	(not specified)	0.3 (pg/mm ²)/min	0.3 (pg/mm ²)/min	0.1 (pg/mm ²)/min
Dimensions	304 x 480 x 490 mm	(not specified)	596 x 593 x 563 mm	600 x 690 x 615 mm	215 x 443 x 135 mm
(W x D x H)					
Net weight	13 kg	(not specified)	47 kg	60 kg	6.5 kg
price	€70 000	€60 000	€114421	€386958	€39 000

The exploitation of the 1D PCs as substrates supporting the long-range surface wave propagation permits researchers to:

(1) increase the sensitivity of PC SW biosensors to the level $\delta d_a \simeq 7 \times 10^{-14} \text{ m/Hz}^{1/2}$ (that corresponds to mass sensitivity $\delta m_a \simeq 70 \text{ fg/mm}^2$),

(2) segregate surface and volume events in biosensing (that may be an important advantage in applications where temperature and composition of the liquid under study vary over a wide range),

(3) enhance the detection of RI variation in the Abbe-like refractometer to the level $n_e \simeq 5 \times 10^{-8} \text{ RIU/Hz}^{1/2}$,

(4) work with thick target ligands, such as living cells, with thickness up to $1\mu m$

(5) obtain one-dimensional spatial selectivity that makes multichannel registration possible and increases throughput of the sensor,

(6) use the same PC chip many times, since a thick final SiO_2 layer may be effectively cleaned

by some active treatment (e.g., in a plasma cleaner).