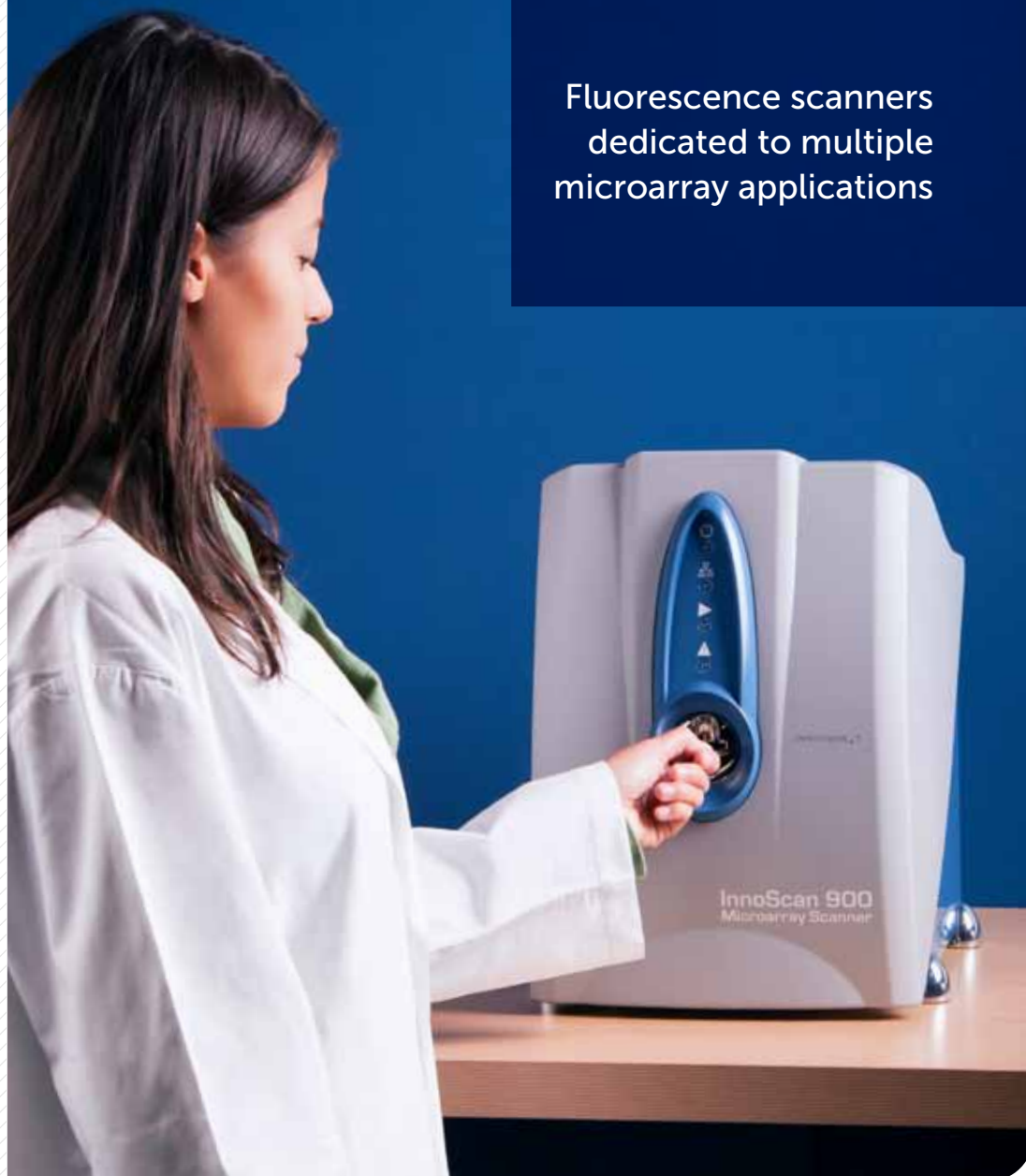
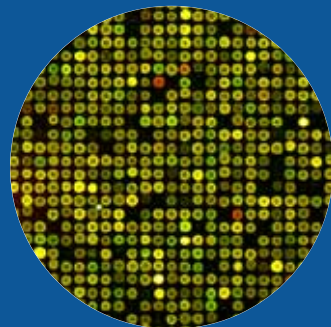


INNOPSYS 

Fluorescence scanners
dedicated to multiple
microarray applications



InnoScan[®]

Microarray Scanners

A complete range of microarray scanners which
combine **quality**, **resolution** and **reliability**

Fields

Basic research

Functional genomics

- aCGH for gene copy-number variation testing
- Gene expression microarrays
- DNA methylation assays

Proteomics

- Antibody arrays
- Peptide arrays
- Functional protein arrays
- Reverse Phase Protein Arrays (RPPA)

Clinical research

Standard tool for evaluating DNA duplications and deletions in an individual.

- Cytogenetics
- Disease biomarker validation
- Disease stratification

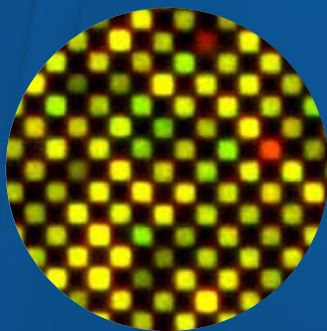
Industry

Perfect for applications in the food and pharmaceutical industries.

- Food contaminant identification
- Pharmacogenomics and Personalized medicine



InnoScan® Microarray Scanners provide uniform scanning across the whole microarray surface thanks to confocal PMT detection and a real-time autofocus system



InnoScan® Microarray Scanners provide users with an open platform capable of scanning all standard slides whatever the substrate: glass, plastic, coated glass, and more.

High density arrays

Through both reducing the size of spots and bringing them closer together, microarrays can now contain several million spots. Innopsys' InnoScan 900 scanner with single slide or AutoLoader capabilities provides users with the highest resolution on the market, thus being the most suitable for reading high density slides such as HD2, HD4 or 4x180K slides.

Low & medium density arrays

BAC arrays, protein arrays or oligonucleotide arrays with spots larger than 40 μm are considered to be low or medium density arrays. The InnoScan 710 range of scanners (single slide and AutoLoader version) is the most suitable for reading low and medium density arrays and ensures **precision** and **reliability** of results.

Special slides

The substrate type and surface chemistry used for manufacturing microarrays vary according to each field of application and each manufacturer. Innopsys scanners are **completely open to different microarray supports** (plastic or glass slides, etc.) and surface chemistries (nitrocellulose, opaque slides, mirror slides, etc.).

Protein microarrays

To diminish background signals due to auto-fluorescence from supports such as nitrocellulose, one can use the InnoScan 710IR to read medium or low density protein arrays at the near infrared channel. Decreasing background signals leads to higher signal-to-noise-ratios (SNR) and hence better sensitivity.

Applications

InnoScan 710

The **InnoScan 710** is a 2-colour fluorescence scanner. With a maximum resolution of 3 $\mu\text{m}/\text{pixel}$, it is the **fastest system on the market** and still maintains excellent image quality. Characterised by simplicity of use at a competitive price, **the InnoScan 710 is the ideal tool for routine microarray use.**

Reliability, High speed, Traceability



InnoScan 900

The **InnoScan 900** is a high resolution 2-colour fluorescence scanner. It is capable of scanning a microarray with a resolution of 1 $\mu\text{m}/\text{pixel}$ and very high image quality, thus being the **most precise on the market**. Characterised by simplicity of use, a competitive price and high performance, **InnoScan 900 is the ideal tool for routine high-density microarray use.**

High resolution, Performance, Precision



InnoScan 900AL and 710AL

The **InnoScan 900** and **InnoScan 710** can be equipped with an Autoloader, **enabling 24 slides to be loaded at the same time**. An interface in the Mapix software allows batches to be created thus allowing different samples to be automatically read and processed.

Automation, High throughput assays, Rapidity



New !

InnoScan 710IR

The **InnoScan 710IR** is a 2-colour near infrared (NIR) fluorescence scanner. Equipped with 670 nm and 785 nm excitation lasers, the **InnoScan 710IR** is capable of scanning NIR-labelled proteins while avoiding support high background. The **InnoScan 710IR scanner is ideal for protein array applications.**

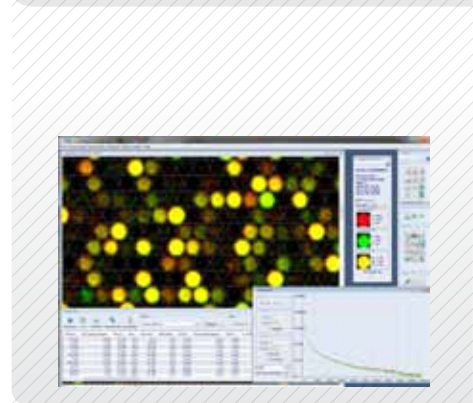
Infrared detection, Protein arrays, High sensitivity



Mapix Software

Mapix is an image acquisition and quantification software for microarrays which combines ease-of-use, user-friendliness and high performance. **Mapix** has the most up to date requirements to browse data from microarray experiments quickly with a high level of reliability and optimised productivity.

Simple, User-friendly, High performance



Technical specifications

Innoscan®

RESOLUTION ($\mu\text{m}/\text{pixel}$)	3-40	1-40	3-40 or 1-40	3-40
LASER EXCITATION WAVELENGTH	● 532 nm ● 635 nm			○ 670 nm ○ 785 nm
DIMENSION (L x D x H)	278 x 457 x 369 mm ³ 10.8" x 18.0" x 14.5"	304 x 460 x 397 mm ³ 11.8" x 18.0" x 15.5"	333 x 595 x 422 mm ³ 13.2" x 23.7" x 16.6"	278 x 457 x 369 mm ³ 10.8" x 18.0" x 14.5"
WEIGHT	15.5 kg (34.2 lbs)	17 kg (37.5 lbs)	28 kg (62 lbs)	15.5 kg (34.2 lbs)
LOADER CAPACITY	1 slide	1 slide	24 slides	1 slide
COMPATIBLE FLUOROPHORES *	● Cy3, Alexa 546, Alexa 555			○ AlexaFluor 680 ○ Dy-680 ○ IRDye 700
	● Cy5, Alexa 647, Alexa 660			○ Alexa 790 ○ Dy-780 ○ IRDye 800
DETECTION TYPE	Real-time confocal with 2 photomultipliers (PMT)			
LASER POWER	Two adjustable laser powers			
GAIN PMT	Linear from 0 to 100 %			
FOCUS	Real-time autofocus / Manual focus offset adjustment 300 μm range, 1 μm increment approximately			
SLIDE SIZE	Compatible with all standard microscope slides: 25 x 75 mm ² / 1" x 3"			
SCANNING AREA	Adjustable up to 22 x 74 mm ²			
SCANNING SPEED	From 10 to 35 lines/second (Limited to 20 lines/second for 1 $\mu\text{m}/\text{pixel}$ scans) Total time : 3.5 minutes per slide at a resolution of 10 $\mu\text{m}/\text{pixel}$ for a simultaneous two-color acquisition AL models: 100 minutes for 24 slides			
DYNAMIC RANGE	> 10 ⁴ in normal mode or > 10 ⁶ in dynamic extension mode			
UNIFORMITY	< 5% CV			
BARCODE READER	Automatic barcode reading			
INTERFACE & SOFTWARE	Ethernet interface			
IMAGE FORMAT	TIFF (16-bit and 20-bit grey scale)			
POWER SUPPLY	100-240 VAC			
MAPIX SOFTWARE	Auto-pmt settings, auto gridding and auto-flagging, batch mode, quality control module, image analysis Data normalization (global and Lowess Smooth), Standard files format, Powerful plug-in capabilities.			

* Non exhaustive list, please contact us for more information about fluorophore compatibility

Class I laser Product
For Research use only

October 2012. PSc-En-009

Specifications subject to change
without notice - Contact us for the
most recent specifications

Carbonne - FRANCE
+33 561 971 974
contact@innopsys.fr

Chicago, IL - USA
+1 312 925 8210
contact@innopsys.com

INNOPSYS

www.innopsys.com