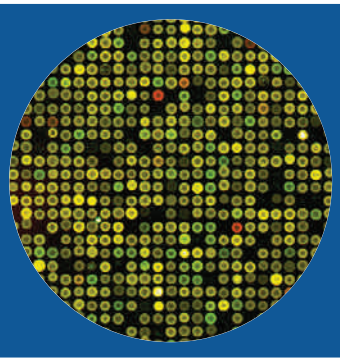
INNOPSYS

www.galli2europe.com

Fluorescence scanners dedicated to multiple microarray applications



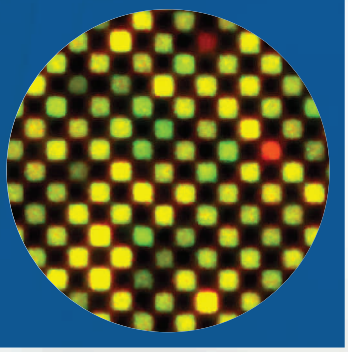
InnoScan®

Microarray Scanners

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

www.innopsys.com

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



www.galli2europe.com

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

Fields

Basic research

Functional genomics

- aCGH for gene copy-number variation testing and SNP for genotyping
- 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

Applications

High density arrays

Through both reducing the size of spots and bringing them closer together, microarrays can now contain several million spots. **Innopsys' InnoScan 910 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, 6x80K or 4x180K.

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 710-IR** 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.

INNOPSYS

A complete range of microarray scanners

InnoScan 710

The **InnoScan 710** is a 2-colour fluorescence scanner. With a maximum resolution of 3 µm/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**.
Thanks to XDR mode (**Extended Dynamic Range**), all InnoScan scanners have a **dynamic range over 10^6** and then are able to detect the lowest signals avoiding saturation.

Reliability, High speed, Traceability

InnoScan 710-IR

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

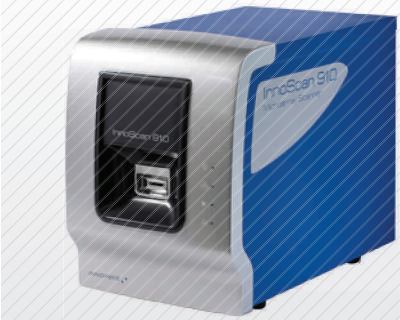
Infrared detection, Protein arrays, High sensitivity

New 910!

InnoScan 910

Dedicated to high density microarrays, the **InnoScan 910** is the fastest and highest resolution scanner in the market. With its **new detection system** and **increased image quality**, the **InnoScan 910 is the ideal tool for routine high-density microarray use**.

High resolution, Performance, Precision



New 910AL!

Autoloader Versions for InnoScan

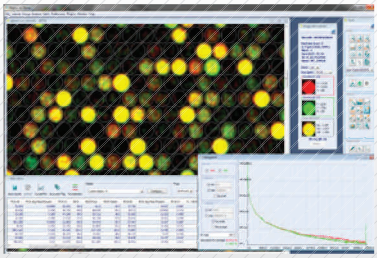
The **InnoScan 710**, **InnoScan 710-IR** and **InnoScan 910** with its new design can be equipped with an Autoloader, **enabling 24 slides to be loaded at the same time**. An interface in the Mapix software allows batches to be created thus allowing different samples to be automatically read and processed.

Automation, High throughput assays, Rapidity

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



www.galli2europe.com

InnoScan®

Technical specifications

	710	710-IR	910 New!	Autoloaders New 910 AL!
RESOLUTION (µm/pixel)	3-40		1-40	
LASER EXCITATION WAVELENGTH (2 laser diodes)	532 nm 635 nm	670 nm 785 nm	532 nm 635 nm	Model dependent
COMPATIBLE FLUOROPHORES*	Cy3 Alexa 546 Alexa 555	Alexa 700 Dylight 680 IRDye 680 Alexa 680	Cy3 Alexa 546 Alexa 555	Compatible with: 1 *InnoScan 710* *InnoScan 710-IR* 2 *InnoScan 910*
	Cy5 Alexa 647 Alexa 660	Alexa 790 IRDye 800 Dylight 800	Cy5 Alexa 647 Alexa 660	
LOADER CAPACITY	1 slide	1 slide	1 slide	24 slides
LASER POWER	Two fixed laser powers			
DETECTION TYPE	Real-time confocal with 2 digital photomultipliers (PMT)		Real-time confocal with 2 analog PMT	Model dependent
PMT GAIN	Linear from 1 to 100 % Step 1%		Linear from 0.1 to 100% Step 0.1% from 0.1 to 1% and 1% from 1 to 100%	Model dependent
OPTICAL FILTER	1 standard fluorescent filter by detection channel		7 position filter wheel 1 standard fluorescence filter and 1 neutral density by channel (5 additional filters on request)	Model dependent
FOCUS	Real-time autofocus Manual focus: offset adjustment 300µm range, 1µm increment			
SLIDE SIZE	Compatible with all standard microscope slides: 25-26 x 75-76 mm² / 1" x 3" ; thickness: 0.9 - 1.2 mm			
SCANNING AREA	Adjustable up to 22 x 74 mm²			
SCANNING SPEED	From 10 to 35 lines/second (l/s) 3.55 minutes per slide at a resolution of 10µm/pixel for a simultaneous two-color acquisition		From 10 to 35 l/s 10.5 minutes for an area of 22 x 22 mm² at 1µm/pixel	Model dependent
DYNAMIC RANGE	> 10^4 in normal mode or > 10^6 in dynamic extension mode			
UNIFORMITY	> 95%			
BARCODE READER	Automatic barcode reading			
INTERFACE	Ethernet interface			
IMAGE FORMAT	TIFF (16-bit and 20-bit in dynamic extension mode)			
POWER SUPPLY	~ 100-240 VAC, 1.2 A, 50-60 Hz			
ACQUISITION SOFTWARE	MAPIX			
DIMENSIONS (L x D x H)	278 x 457 x 369 mm³ 10.8" x 18.0" x 14.5"		316 x 549 x 432 mm³ 12.5" x 21.6" x 17.0"	1 333 x 595 x 422 mm³ 13.2" x 23.7" x 16.6" 2 322 x 656 x 439 mm³ 12.7" x 25.8" x 17.3"
WEIGHT	15.5 kg (34.2 lbs)		28 kg (62 lbs)	1 28 kg (62 lbs) 2 33 kg (73 lbs)

Class I laser Product
For Research use only

September 2015. PSc-En-015

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

INNOPSYS

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

F.LLI GALLI G. & P.
Via dell'Artigianato 12
20090 Pieve Emanuele - Milano - Italia
+39 02 90720705
innopsys@galli2europe.com

www.innopsys.com