Data Sheet

SensoSpot FLUORESCENCE

Sensovation — Smart Imaging Solutions — a Miltenyi Biotec Company

SensoSpot® Fluorescence
Low Density Microarray Analyzer

The Power of Multiplexing

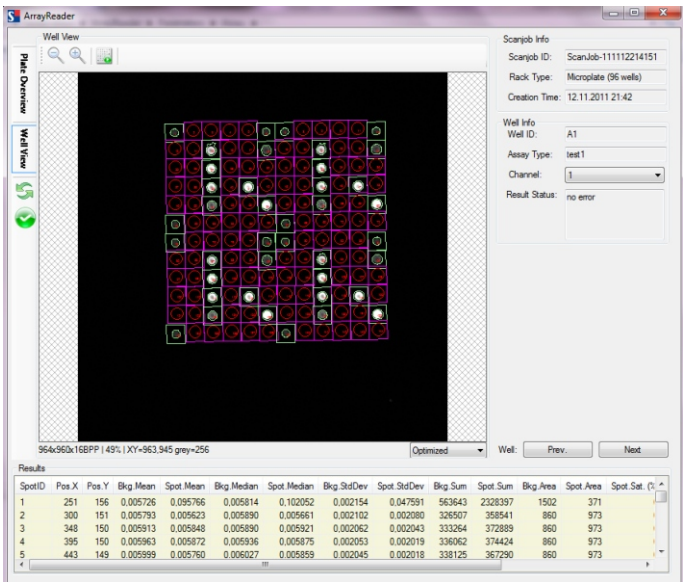
Multiplexing saves time, reagents, and sample. Sensovation's **SensoSpot® Fluorescence** Microarray Analyzer enables users to detect and analyze many assays in each well of a 96-well-plate, multiplexed arrays on slides or proprietary formats. **SensoSpot® Fluorescence** is designed to read low-density microarrays with spot sizes of 50µm and larger. **SensoSpot® Fluorescence** is ideally suited for multiplexed ELISAs and genotyping assays and is easily integrated with standard laboratory automation.

Sensovation's Fluorescence Microarray Reader is an innovative detection instrument capable of reading multiplexed arrays in a variety of formats. **SensoSpot®** is user-friendly and especially designed for routine use in diagnostic and biochemical analysis.

SensoSpot® Fluorescence provides the same functionality as a confocal, laser-based microarray scanner but at a fraction of the cost.

SensoSpot® Fluorescence is available in three different versions:

- Green/red for dyes like Cy3 and Cy5 / Alexa 647
- Green/Red/Blue: for dyes like Cy3, Cy5/Alexa 647 and FITC/Alexa 488



*Screenshot from Array Reader software. "Well-view" showing a fluorescent microarray image acquired by **SensoSpot® Fluorescence**. The array analysis is based on automatic spot detection using outline feature. The spot intensities and other measurement data are listed together with statistical parameters in the result table.*

SensoSpot® Fluorescence is a fully integrated, standalone instrument with touchscreen and built-in PC. The instrument comes standard with ArrayReader Software, a powerful and intelligent "on-board" instrument control and array analysis software. The microarrays are analyzed in real-time, right during measurement. Intelligent spot-tracking algorithms assure that each spot is found and analyzed, based on spot shape and spot size.

SensoSpot® Fluorescence reads and analyzes 96 microarrays in a standard SBS microplate within less than 4 minutes depending on the integration time. No lasers are used and the optical system does not contain any moving parts. The imaging areas can be programmed flexibly within the footprint of a SBS microplate (85mm x 125mm). Alternatively you can analyze up to 4 slides in parallel using Sensovation's 4-slide carrier or any application-specific biochip format.

This instrument concept is unique in the industry - with obvious advantages: A compact and rugged instrument at affordable cost, providing fast result presentation with highest sampling flexibility, ideal for routine diagnostic applications.

Sensovation AG • Markthallenstrasse 5 • D-78315 Radolfzell Germany • +49 7732 30278 20 • info@sensovation.com • www.sensovation.com

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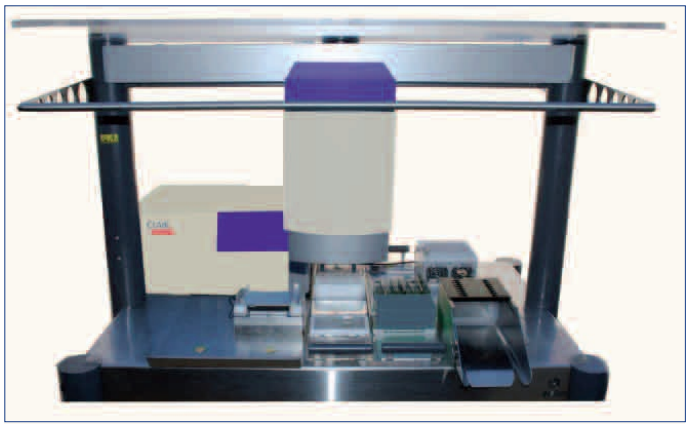

***SensoSpot®** is robot friendly. The instrument can be integrated into liquid handling stations for full automation of multiplexed assays.*

Features and Benefits

- Standalone instrument with touchscreen and PC
- Powerful on-board array analysis software
- Up to 3 fluorescent channels
- Compact, robust, affordable
- Automated spot analysis
- Multi-format: 96-well plates, slides, biochips
- Easy integration with liquid handling systems
- ISO 9001 / 13485 certified

Multiplexed Detection & Analysis

SensoSpot Fluorescence® is suited for a variety of applications:

- Immunoassays
- Gene expression
- Protein arrays

Ideal for studying and diagnosing multifactorial diseases such as:

- Infectious diseases
- Autoimmune diseases
- Allergy

Specifications

Imaging system		
Resolution on the sample:	6.7 µm	
Camera pixel resolution:	1296 x 964 full resolution	
Scan time for whole 96-well plate:	<4 min. + integration time	
Excitation:	High Power LED, typ. 60mW	
Excitation wavelength:		
SensoSpot blue/red	434 – 513nm; 586 – 643nm	
SensoSpot green/red	493 – 544nm; 609 – 645nm	
SensoSpot blue/green/red	414 – 480nm; 523 – 542nm; 628 – 637nm	
Emission Detection Wavelength:		
SensoSpot blue/red	524 – 562nm; 655 – 692nm	
SensoSpot green/red	563 – 590nm; 665 – 717nm	
SensoSpot blue/green/red	493 – 518nm; 560 – 608nm; 654 – 720nm	
Sample holder:	Supports SBS format Microplates with flat glass bottom, designed for microarrays. Focus plane is between 1mm and 10mm above the seating plane of the microplate.	
Dimensions and weight		
Mechanical dimensions:	Width	440 mm
	Depth	340 mm
	Height	210 mm
Weight (without touch screen)	15 Kg	
Environmental		
Operating temperature	+15 to +35 degrees Celsius	
Relative humidity	10 to 75 % non-condensing	
Storage temperature	+5 to +40 degrees Celsius	
Electrical		
AC input	100-240V, 47-63 Hz	
Input power	max. 150W	
Monitor supply output	12DVI max. 2,5A	
Result data		
Image storage format	16-bit TIFF grayscale	
Results storage format	CSV spreadsheet, XML files	
Touch screen monitor		
Touchscreen type	Resistive	
Resolution	800x600 pixel	

SensoSpot® Fluorescence is a generic imaging reader, independent of application. The customer is informed that the use of this product in combination with third party intellectual property may have implications according to patent law.

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