

FlowCam[®] 8100

Rapid & easy particle analysis



Particle Analysis with Vision
FLUID IMAGING TECHNOLOGIES, INC.



FlowCam[®] 8100 Benefits

- Easier self-rinsing and cleaning
- Faster camera (higher throughput)
- Quick-connect flow cell holder
- Integrated pipette-based sample port
- Compatible with FlowCam[®] ALH

FlowCam 8100 applications:

- Detection & measurement of protein aggregates and other particulates
- Formulation research & development
- QC diagnostics
- Stability studies and shelf life simulations

Industry-leading Image Quality

Better image quality yields more accurate measurements

		FlowCAM [™]	MFI [™]
Polystyrene beads	2 μ m		
	5 μ m		
	10 μ m		
glass spheres	2 μ m		
	8 μ m		
"pseudo protein standard"	2 μ m		
	5 μ m		
	10 μ m		
	25 μ m		
aged mAb aggregates	2 μ m		
	5 μ m		
	10 μ m		
	25 μ m		

Reprinted from European Journal of Pharmaceutical Sciences 53 (2014) 95–108, Werk, Tobias, Volkin, David B., Mahler, Hanns-Christian, *Effect of solution properties on the counting and sizing of subvisible particle standards as measured by light obscuration and digital imaging methods*, with permission from Elsevier.

FlowCam 8100

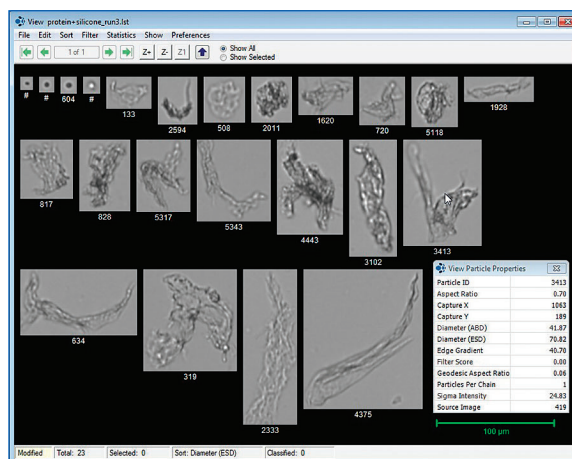
Particle Count	Yes
Concentration	Yes
Particle Size (ESD)	Yes
Measured Parameters	<p>Basic Shape Parameters: Area, Aspect Ratio (width/length), Area Based Diameter (ABD), Equivalent Spherical Diameter (ESD), Length, Volume (ABD-based), Volume (ESD-based), Width</p> <p>Advanced Morphology Parameters: Area (Filled), Circle Fit, Circularity, Circularity (Hu), Compactness, Convex Perimeter, Convexity, Elongation, Fiber Curl, Fiber Straightness, Geodesic Aspect Ratio, Geodesic Length, Geodesic Thickness, Perimeter, Roughness, Symmetry</p> <p>Gray Scale and Color Measurements: Average Blue, Average Green, Average Red, Edge Gradient, Intensity, Blue/Green Ratio, Red/Blue Ratio, Red/Green Ratio, Edge Gradient, Intensity, Sigma Intensity, Sum Intensity, Transparency</p>
Particle Size Range	2µm to 100µm
Technology	Dynamic Imaging Particle Analysis
Image Type	8-bit Grayscale TIFF (Monochrome Camera) or 24-bit Color TIFF (Color Camera)
Fluidics	High precision, computer controlled syringe pump
Minimum Sample Volume	100µL
Frame Rate	Up to 120 frames/sec
Sampling Efficiency	Up to 100%
Software	VisualSpreadsheet® Software: Patented Interactive Scattergram® (allows selecting of particles directly from any graph or scattergram), automated value and statistical pattern recognition, interactive image-based filtering and sorting, up to 4 simultaneous histograms/scattergrams displayed (from 16 total available), direct export of all data and summary data to Excel (or any other spreadsheet), print to PDF, automatic classification, and filtering during acquisition.

Request a Free Sample Analysis

Send us your sample, and we will provide:

- A Web-based interactive presentation of the results.
- Histograms and scattergrams showing the size and distribution of particles.
- A Microsoft Excel spreadsheet with all the measurement data, including count, length, width, and ESD.
- Digital images of the cells and particles in your sample.

Call +1 207-289-3200 or visit our website for information on how to submit a sample.



Protein aggregates imaged by FlowCam 8100