

### Next Generation Submicron Particle Imaging

#### OVERVIEW

FlowCam Nano features patented oil-immersion, flow imaging technology paired with our industry-leading image analysis software VisualSpreadsheet<sup>®</sup> to provide the most comprehensive particle analysis research and development tool for protein formulations and nano drug delivery systems, bioprocess monitoring, and materials characterization.

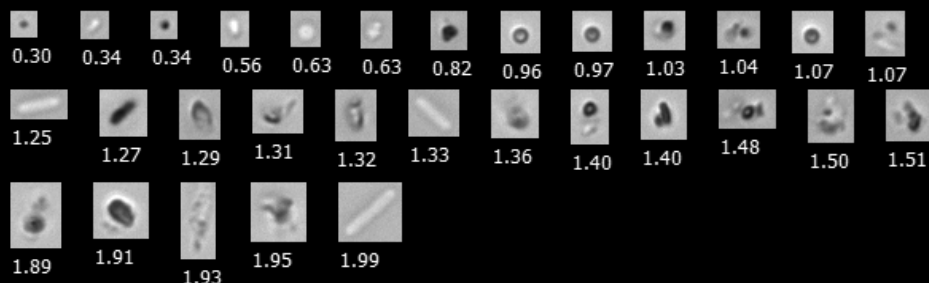
FlowCam Nano represents a leap forward in technology with the highest-resolution images of submicron particles available on the market today. In addition, FlowCam Nano offers streamlined auto-focus technology for ease of use.

- Image and analyze particles ranging in size from 300 nm to 2 μm
- Obtain relative quantifications of intrinsic, extrinsic, and inherent particles in parenteral drugs
- Use morphological data to identify the structure and nature of contaminants and improve product development



#### APPLICATIONS

- Formulation development
- Biopharmaceutical QA/QC
- Biomedical research
- Gene therapy aggregate monitoring
- Bioprocessing
- Materials characterization

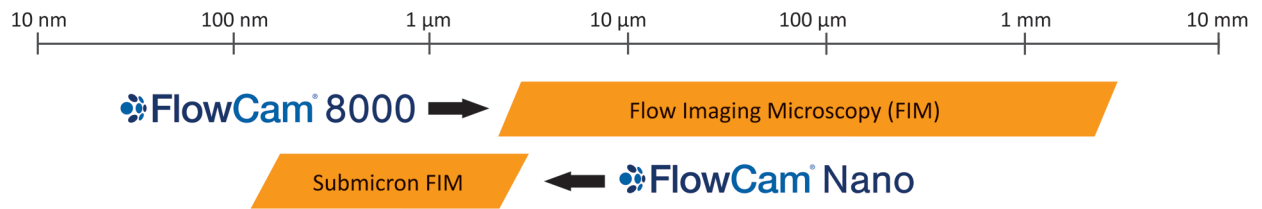


Particulates within a parenteral drug formulation as seen by FlowCam Nano. The diameter (μm) of each particle is noted beneath each image. Using VisualSpreadsheet software, images can be analyzed and sorted by 40+ parameters, including morphological characteristics.

## Specifications

<b>Method</b>	Flow imaging microscopy with oil immersion
<b>Particle Size Range</b>	300 nm to 2 μm
<b>Sample Volume</b>	Minimum volume: 50 μL
<b>Magnification &amp; Flow Cell</b>	40X magnification with 60 μm flow cell
<b>Camera</b>	High Resolution (1440 x 1080 pixels) CMOS sensor, monochrome, up to 130 frames per second
<b>Flow Rate</b>	up to 20 μL/minute
<b>Fluidics</b>	Micro-syringe pump with 250 μL syringe
<b>Measured Parameters</b>	<p><i>Basic Shape Parameters:</i> Area, Aspect Ratio (width/length), Area Based Diameter (ABD), Equivalent Spherical Diameter (ESD), Length, Volume (ABD-based), Volume (ESD-based), Width, 3 Biovolume Measurements</p> <p><i>Advanced Morphology Parameters:</i> 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><i>Gray Scale Measurements:</i> Edge Gradient, Intensity, Sigma Intensity, Sum Intensity, Transparency</p>

### Extending particle imaging below 2 μm



Will FlowCam Nano solve your particle analysis needs?

Contact us for more information or to arrange for a demo or sample analysis.

