

FlowCAM® VS-Series Specifications



Particle Analysis with Vision
FLUID IMAGING TECHNOLOGIES, INC.

FlowCAM® VS-Series — All Models		
Size Range	2µm to 2mm	
Camera	Firewire (IEEE 1394) Digital 1280x960 Pixels	
Image Type	8-bit Grayscale (Monochrome Camera) or 24-bit Color (Color Camera)	
Image Format	8-bit (monochrome) or 24-bit (color) TIFF	
Magnification Options/Flow Cells	20X (200X overall magnification), Flow Cells (depth): 50µm 10X (100X overall magnification), Flow Cells (depth): 80µm, 100µm, 200µm 4X (40X overall magnification), Flow Cells (depth): 200µm, 300µm, 600µm, 2X (20X overall magnification), Flow Cells (depth): 600µm, 800µm, 1000µm, 2 x 2mm	
Fluidics	Micro Syringe Pump (computer controlled)	
Flow Rate	0.005 ml/min to 250ml/minute (Dependant upon magnification, flow cell depth, camera frame rate, efficiency desired, etc.)	
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.	
FlowCAM® VS-Series	VS-I	VS-IV
Particle Count/Concentration	Yes	Yes
Particle Size (ESD)	Yes	Yes
Excitation Wavelength	N/A	488nm or 532nm (custom configurations available)
Fluorescence Emission Wavelengths	N/A	<ul style="list-style-type: none"> • 575nm ±15nm (Phycoerithrin) • >650nm (Chlorophyll) • 525nm ±20nm (FITC) Note: Only 2 per system (Other emission wavelength filters available by custom order)
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, Sigma Intensity, Sum Intensity, Transparency</p>	Same as VS-I with addition of; <ul style="list-style-type: none"> • Fluorescence triggering • Scatter triggering
FlowCAM® VS-Series — All Models	Benchtop	Portable
Power Requirements	100-240 VAC, 50/60 Hz	100-240 VAC, 50/60 Hz or 12V DC
Dimensions	21" width X 16" deep X 12" high	18" width X 15" deep X 26" high - (14" closed lid)
Shipping Weight	95 lbs (60 lbs unit only)	85 lbs (60 lbs unit only)
Environmental (Temperature & Humidity)	Operating: 5-40° C, Humidity 20-80% (Non Condensing) Storage: -20-60° C, Humidity 20-95% (Non Condensing)	