

Rapid Zooplankton Analysis

OVERVIEW

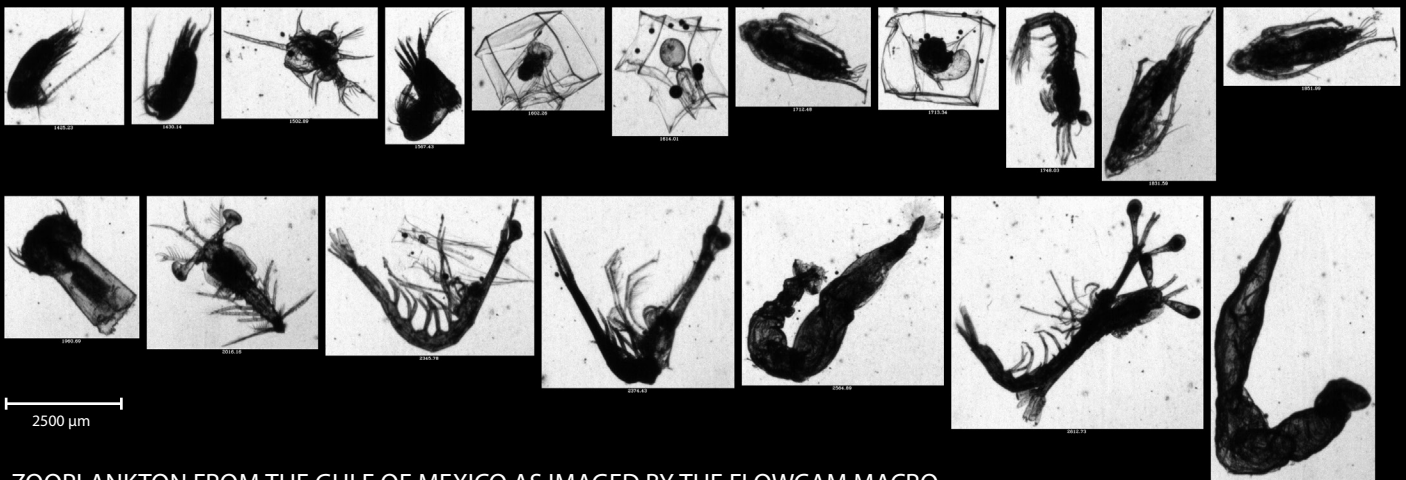
More than 500 FlowCams[®] are being used in 50+ countries to count, measure, and identify plankton and zooplankton. The FlowCam Macro is designed to analyze large particles.

- Analyze particles sized 300 μm - 5 mm
- Process 200-400 mL/minute of live or preserved samples
- Image particles as large as 17 mm long and 5 mm wide
- Capture sample after analysis for reuse
- Count and measure concentration of zooplankton



APPLICATIONS

Rapid identification of zooplankton and other particles up to 5 mm in size



ZOOPLANKTON FROM THE GULF OF MEXICO AS IMAGED BY THE FLOWCAM MACRO

Rapid Zooplankton Analysis

FlowCam Macro	
Particle Size Range	300 µm to 5 mm
Magnification & FlowCells	0.5X objective, 2 mm and 5mm flow cells
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, 3 Biovolume Measurements</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, Blue/Green Ratio, Red/Blue Ratio, Red/Green Ratio, Edge Gradient, Intensity, Sigma Intensity, Sum Intensity, Transparency</p>
Camera & Images	1,920 x 1,200 pixels. TIFF images. 8-bit grayscale (monochrome camera) or 24-bit color (color camera)
Fluidics & Flow Rate	100-900 mL/minute —larger particles use slower flow rate. High-capacity industrial peristaltic pump.
VisualSpreadsheet®	Patented Interactive Scattergram® (allows particle selection 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. Software supports export of images to open-source image analysis programs.
Weight & Dimensions	28 kg with pump, 82 cm x 60 cm

REQUEST A FREE SAMPLE ANALYSIS

Send us your preserved or live sample and we will provide:

- A web-based, interactive presentation of results
- Histograms and scattergrams showing size and distribution of particles
- A Microsoft Excel spreadsheet with measurement data, including count, length, width, and diameter
- Digital images of the zooplankton and particles

