

# ISIIS-DPI Plankton Shadowgraph Camera

Model: ISIIS-DPI P100



## Overview

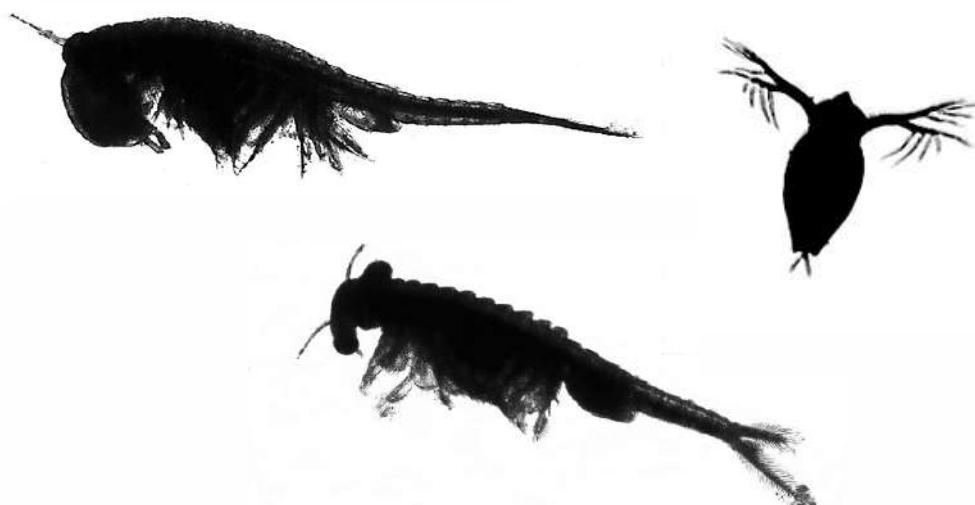
The **ISIIS-DPI P100** is a mid-size imaging solution designed for studies requiring **increased sampled volumes** while maintaining high-quality imaging of **mesoplankton and fragile organisms**. Offering a very similar resolution as the P75, it is particularly well suited for investigations where maximizing water volume per image is critical.

When optimized for organisms approximately 500  $\mu\text{m}$  and larger, the P100 can achieve a depth of field approaching 20 cm with a field of view of  $\sim 61 \times 61$  mm, significantly increasing the imaged volume. Alternatively, the system can be configured to resolve organisms down to  $\sim 300 \mu\text{m}$ , offering a larger field of view than the P75 while trading some depth of field to limit focus degradation and maintain image quality.

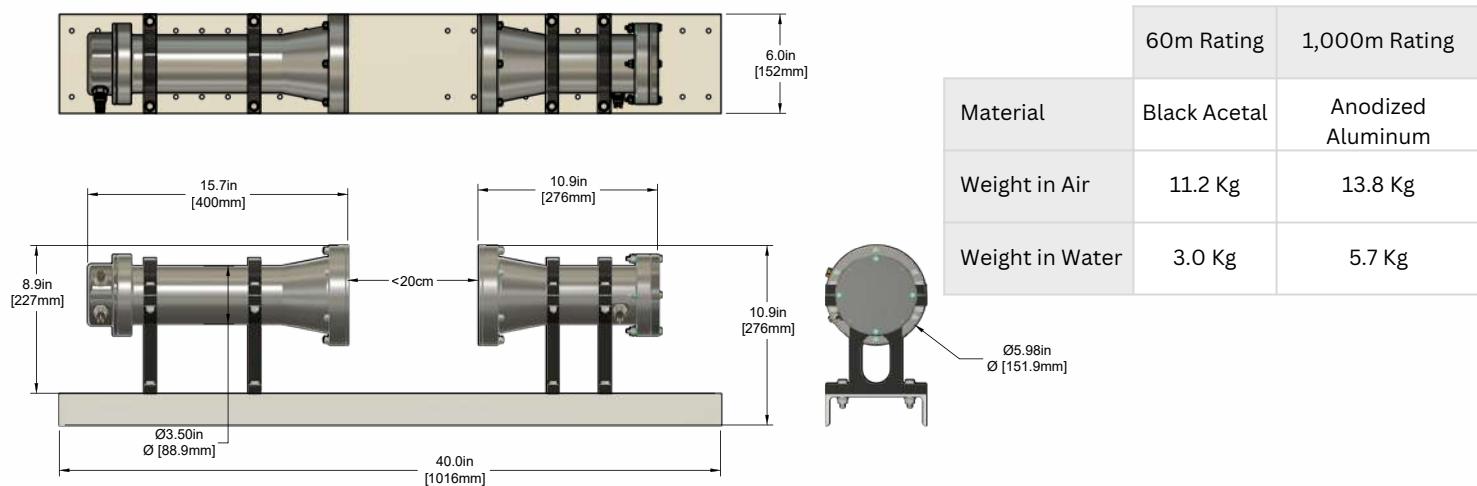
The P100 samples approximately 0.74 L per image, compared to 0.28 L for the P75, providing a substantial gain in volumetric sampling. Like the P75, it can be towed at speeds up to 3.25 knots, making it compatible with a wide range of platforms and survey strategies, including towed vehicle transects and large-area mapping.

As with all ISIIS-DPI P-series systems, the P100 is available in 60 m and 1,000 m depth-rated configurations. The P100 integrates seamlessly with SIDEKICK Performance, allowing plankton imagery to be synchronized with complementary oceanographic measurements.

The result is a compact, field-proven system that simplifies deployment while enabling quantitative, environmentally contextualized plankton studies.



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## Features

Standard Field of View:	61mm x 61mm	Image File Size	4.2 MB, 2050 px x 2045 px
Standard depth of Field:	100 to 200mm	Camera resolution:	5MP sensor, 3.45µm pixels, 2/3"
Pixel Resolution:	30µm/pixel	Camera Frame Rate:	up to 27fps
Recommended for Particles:	>500µm	Light:	Blue 475nm, Red 630nm as an option
Max. Water Speed *	3.25 knots	Power:	12V 6 Watts
* 100 % coverage condition; higher flow implies sub-sampling.		Connectors:	MCBH8M-CAT, 2 x MCBH2M-Power

## Deployment Methods

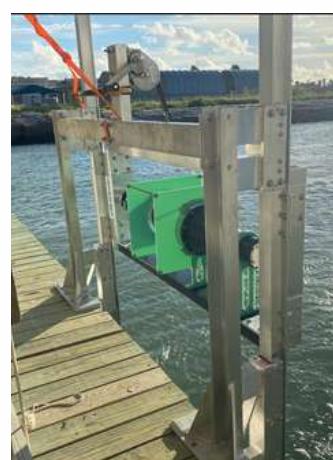
Towed Vehicles



Multiple Nets



Piers & Mesocosms



CTD Rosettes

