WISP Orca

Zealquest Asia



Never miss a measurement with the Orca!



The Water Insight WISP Orca sets a new standard for measuring water quality by offering a comprehensive, user-friendly experience: from measurement guidance and quick field analysis to automatic cloud storage and easy data handling.

The WISP Orca is designed for fast and precise optical measurements of ecological water quality (chlorophyll, cyanobacteria, turbidity,.. etc) and for calibration / validation of satellite data.

The Orca is ideal for e.g.

- Scientists: Ocean Colour or aquatic ecologists, either for research or teaching
- Water managers: for regular or extra monitoring, modelling and automated responses.

Get instantaneous results, low price per measurement and ease of use









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The complete close sensing solution

Why use the WISP Orca?

- Complete data handling in a secure cloud environment from storage, quality control flagging, processing with multiple published algorithms to visualisation or automated API export
- Fixed Total Cost of Onwership with Gold service including SIM costs, support, shipping and recalibration (yearly fee applies)
- Instant results on screen
- Built in GPS and tilt sensor
- Single spectrometer measures Lup, Lsky and Ed, minimising calibration issues
- Minimal training required
- Safe to operate with only one hand
- Unlimited number of measurements

About the predecessor WISP-3: "Operated by experts or by early career students, it always provided us with water reflectance of lakes, ponds, rivers and coastal zones" Mariano



Controller	iPhone SE, supplied with Orca (4/5G internet)
On-board computer	WI board, including GPS and tiltsensor
Power	Built-in battery
2 Radiance channels	Lup and Lsky under 42°
1 Irradiance channels	Upward looking Ed
Physical characteristics	
Wavelength range	Max: 220-1100 nm (depends on calibration)
Nominal spectral	0.43 nm
resolution	
Spectral resolution FWHM	4.65 nm
Signal/Noise	Min 330:1
Integration time	30us to max 40s
Temperature range	0-55°C
Stray light	<0.2%
Size	26x21x11 cm
Weight	1,3 kg
Measurements	
Output	Quality controlled Rrs(0+) at 1 nm
	Chl-a, TSM, CPC concentrations, Kd and
	floating layer detection and more
Calibration	Against gold standard instrument that is
	calibrated using NIST traceable lamp

