

Calypso

Unmanned Survey Platform

USP01

.Ocean
nautical innovations



PRELIMINARY

Calypso

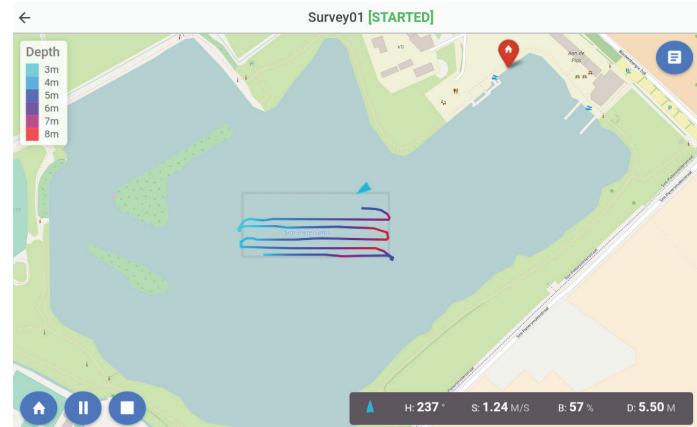
The Unmanned Survey Platform (USP) Calypso is an inflatable, full autonomous surface vehicle that can carry a wide range of sensors for hydrographic and environmental surveys. The calypso is connected to the cloud platform Atlantis for addressing the autonavigation module. The auto navigation module allows the calypso to interrogate augmented maps and to avoid objects and plan survey paths or survey areas. The maps can be consulted via a tablet connected to

the cloud. The Calypso will be controlled automatically based a defined survey area. Other optional Atlantis modules are data storage and data processing modules.

Calypso provides standard a single beam echo sounder, but various other types of sensors can be mounted on the platform as well, like a multibeamechosounder, a camera, lights, gas sensors, temperature sensors, ADCP or water sampler.

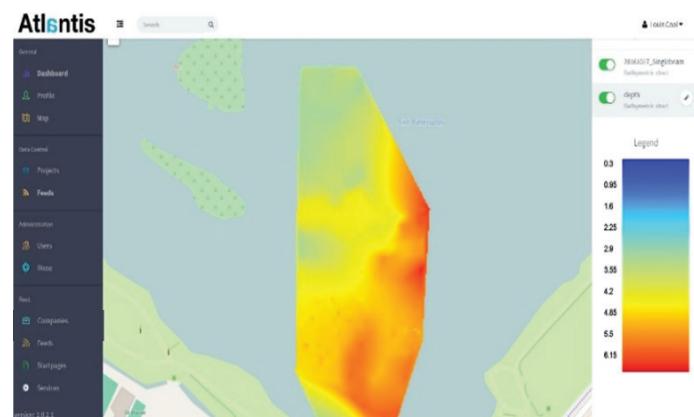
Autonavigation Module

Calypso is connected via the 3G/4G or WiFi network to the cloud platform Atlantis. On board of the Calypso there is standard a control unit, GPS, electronic compass and echosounder foreseen. The Atlantis cloud autonavigation module provides augmented maps on which the calypso can take decisions. Based on the augmented maps the Calypso can plan his trajectory, can cover a selected area and will avoid objects depicted on the map.

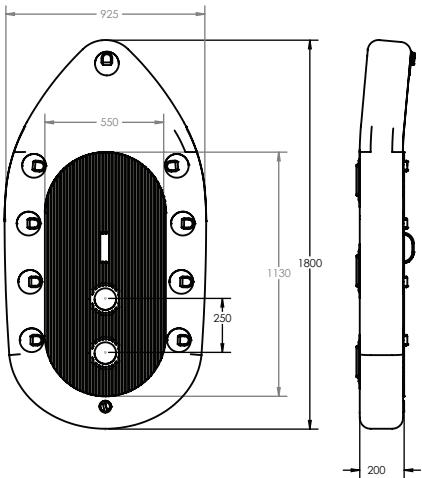


Atlantis

The onboard echosounder provides a depth profile. Together with the navigation path this depth profile is depicted in the augmented Atlantis map. The platform comes with a user friendly web based visualization tool. The data can be combined with other survey data from all kinds of hydrographical equipment. On the Atlantis platform also data processing capabilities like interpolation algorithms and data storage are available.



Specifications



Length board	1800mm
Width board	925mm
Draft	210mm
Weight	25kg
Payload	150kg
Speed	Max 3 knots
Endurance	Minimum 4 hours @ 12V/100Ah
Control	Cloud control and R/C
R/C range	5km open sight
Propulsion	2x 12V underwater rotors
Data communication	3G/4G, WiFi or local storage
Sensor mount	2x Ø100mm moon pools
GPS accuracy	3000mm
Echosounder accuracy	50mm
Echosounder resolution	10mm
Echosounder opening angle	8°
Compass accuracy	2°



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