

YUCO-CTD

We thank you for your interest shown to our Micro AUV **YUCO-CTD**. We are pleased to give you further information throughout this document. Its purpose is informing you about all the specifications and advantages of the products constituting your price quotation.

YUCO-CTD micro-AUV just make AUV technology accessible. Using **YUCO-CTD** micro-AUV is certainly nowadays one of the most simple and cost-effective way to perform bathymetric surveys.

Equipped with a **CT sensor RBR Legato** **YUCO-CTD** micro-AUV underwater vehicle is ideally fitter for costal monitoring or lake monitoring that require to go often at site even for single person deployments.



1 Start Key.

With its robust mast, **YUCO** is protected from the first AUV risk: water ingress. It allows UHF radio communication. It also contains **powerful flashing LEDs** allowing smooth deployment and recovery.

3 The nose is the wet part of **YUCO** It allows to customize micro-AUV within a specific limit of dimension of weight.

4 **CTD sensor** allowing to monitor salinity and temperature.

5 DVL (Doppler Velocity Logger) allows a navigation accuracy better than +/- 1%. **YUCO** micro-AUV can keep a navigation from seabed.

6 Sealed dry section containing the battery. **YUCO** is designed such as the dry section shall never be open **avoiding any risk of water ingress**.

7 Fins are designed to allow a precise navigation.

8 The propeller.

YUCO-CTD micro AUV

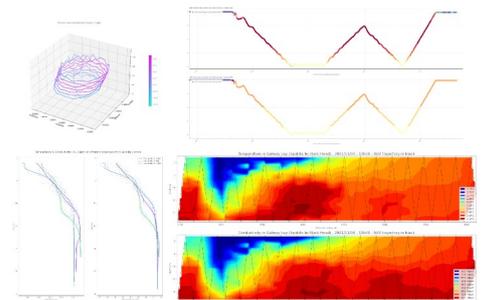
Lenght	112 cm
Diameter	12 cm
Weight in air	10 kg
Depth rating	300 m
Speed	2 to 6 knots
Endurance	6 hours at 6 knots
Accurate navigation	Better than $\pm 1\%$
Energy	Rechargeable Lithium-Ion or NiHM (on request)
Charging	24 V External Connector
CTD sensor	
Temperature	
Range	$-5\text{ }^{\circ}\text{C}$ to $42\text{ }^{\circ}\text{C}$
Initial accuracy	$\pm 0.002^{\circ}$ (-5 to $+35\text{ }^{\circ}\text{C}$) $\pm 0.004^{\circ}$ ($+35$ to $+42\text{ }^{\circ}\text{C}$)
Resolution	$0.00005\text{ }^{\circ}\text{C}$
Typical stability	$\pm 0.002\text{ }^{\circ}\text{C}$ per year
Time constant	$< 1\text{ s}$ (standard), $< 0.1\text{ s}$
Conductivity	
Range	0 to 85 mS/cm
Initial accuracy	$\pm 0.003\text{ mS/cm}$
Resolution	0.001 mS/cm
Typical stability	$\pm 0.010\text{ mS/cm}$ per year

Optional

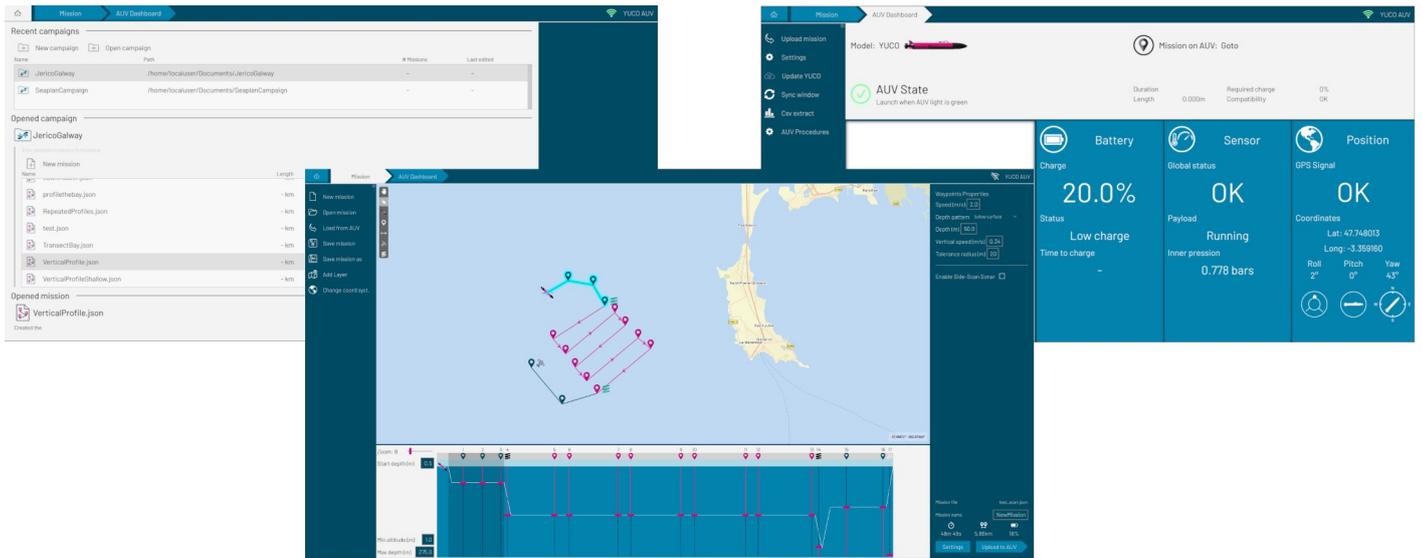
DVL	
Frequency	1 MHz
Ping rate	4 - 26 Hz
Beam angle	22.5 degrees
Max altitude	50 m
Max velocity	2.6 m/s
Velocity resolution	0.01 mm/s

Key Features

-  *Single person deployment and recovery.*
-  *Accurate navigation.*
-  *Easy to use.*
-  *Great autonomy.*



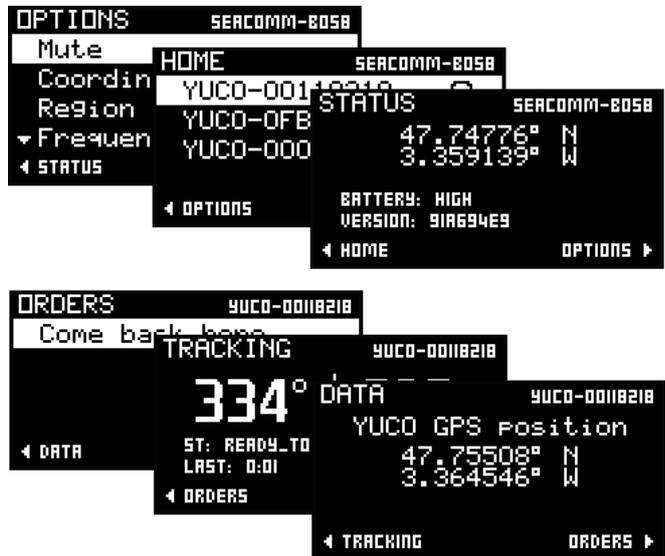
SEAPLAN



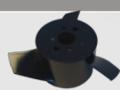
SEAPLAN software developed by SEABER, is an ideal and versatile interface to set up mission and monitor YUCO micro-AUV. It allows to create waypoints and segments fully settable (speed, depth, latitude, longitude, etc) in order to create missions. The AUV Dashboard allows to monitor YUCO micro AUV and to display faults and their resolutions. Logs are exported under .CSV format.

Thanks to its mission programming savings and updates, SEAPLAN facilitates discovery of new area as well as repetitive mission in similar locations.

SEACOMM



SEACOMM is the communication device with YUCO micro-AUV during mission. Communicating by UHF radio, it allows to received and send message from and to YUCO micro-AUV as soon as its mast is out of water. It can give simple pre-register order to YUCO such as "come back here" and displays micro-AUV last know GPS position.

<i>YUCO Accessories</i>			
Start Key with Floating necklace		YUCO Charger	
Ballasts kit to adjust buoyancy		Boathook	
Rugged case with wheels for transport		Foam ber	
<i>SEAPLAN Accessories</i>			
USB key containing SEAPLAN			
<i>SEACOMM Accessories</i>			
SEACOMM device		4 batteries	
<i>Spare parts</i>			
Spare fins		Spare propeller	
<i>Tools kit</i>			
Screws kit		Vacuum pump	
Screwdriver Torx10		Screwdriver	

Why choosing YUCO-CTD ?

YUCO micro-AUV kit is think to be self-efficient:

- ▶ A micro-AUV, **YUCO-CTD**, which is compact and easy to use. Able to down to 300 m depth rated, our micro-AUV can efficiently suited on the top of the **YUCO-CTD** micro-AUV to ensure best measurement in flow.

- ▶ One software, **SEAPLAN**, to monitor **YUCO**, prepare mission and to retrieve mission data.
- ▶ One communication device, **SEACOMM** to manage each mission with confidence.

As **YUCO**'s dry section should never be open, there is no risk of water ingress due to a bad user closing.