



# **AUTOMATE YOUR BOAT**

TECHNICAL SHEET



**AUTOMATE YOUR BOAT**

**COLLECT**



**MONITOR**



**CONTROL**



.Ocean Cloud



Data from all sensors is captured and processed directly onboard for real-time autonomy — even without cloud connection.

Mission data is sent to the dotOcean Cloud for live visuals from the maritime situational picture.

With the AYB App, the operator can plan, adjust and control missions in real time — from one interface.

**NAVIGATION**

And safety sensors



AYB combines AIS, radar, LiDAR and EO/IR cameras for full situational awareness. These sensors detect obstacles and nearby vessels, ensuring safe and autonomous navigation even in poor visibility.

**PAYLOAD**

And mission sensors



Integrates single- and multibeam sonar, PTZ cameras and inspection tools for above- and below-water missions. Live data enables survey, monitoring or automatic responses to detected objects.

**MAPPING**

And mission context



Displays live data through map overlays with OpenSeaMap, ENC S-57 or S-100 charts and custom geofencing zones. Gives a clear, real-time view of vessel position, detections and mission boundaries.

**THIRD PARTY**

Data Integration



Connects external data like AIS feeds, weather or traffic systems through the dotOcean Cloud. Expands mission intelligence and awareness across connected platforms.

**MULTIPLE SENSORS, ONE CLEAR VIEW — DOTOCEAN CLOUD COMBINES ALL DATA STREAMS INTO A SINGLE, REAL-TIME PICTURE.**

.Ocean Cloud



**AUTONOMY & SMART FEATURES**

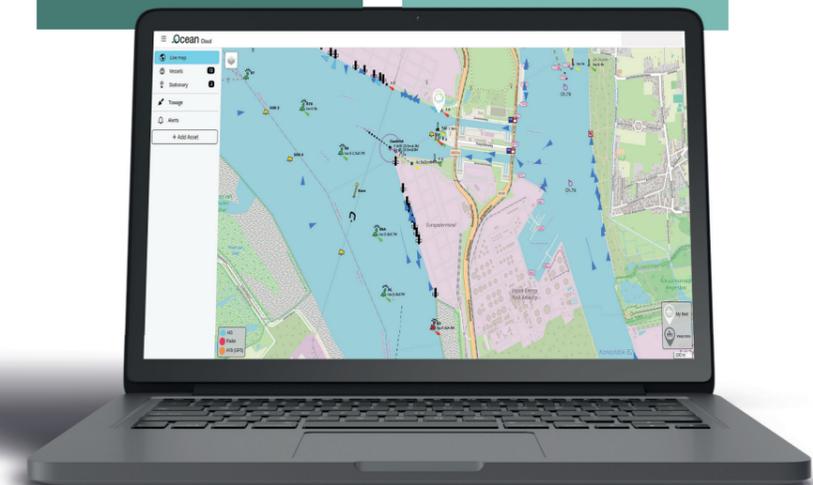
- **Follow-Me & Points of Interest**  
Automatically follows moving targets or navigates to selected points of interest.
- **COLREG Compliant Navigation**  
Navigates safely among other vessels following maritime rules.
- **Obstacle Avoidance**  
Detects and avoids objects in real time.
- **Collaborative Behavior**  
Coordinates actions between multiple autonomous units from one single screen
- **Smart Waypoint & Grid Navigation**  
Plans and executes optimized routes and survey grids automatically.
- **Vessel Status Monitoring**  
Continuously monitors system health.

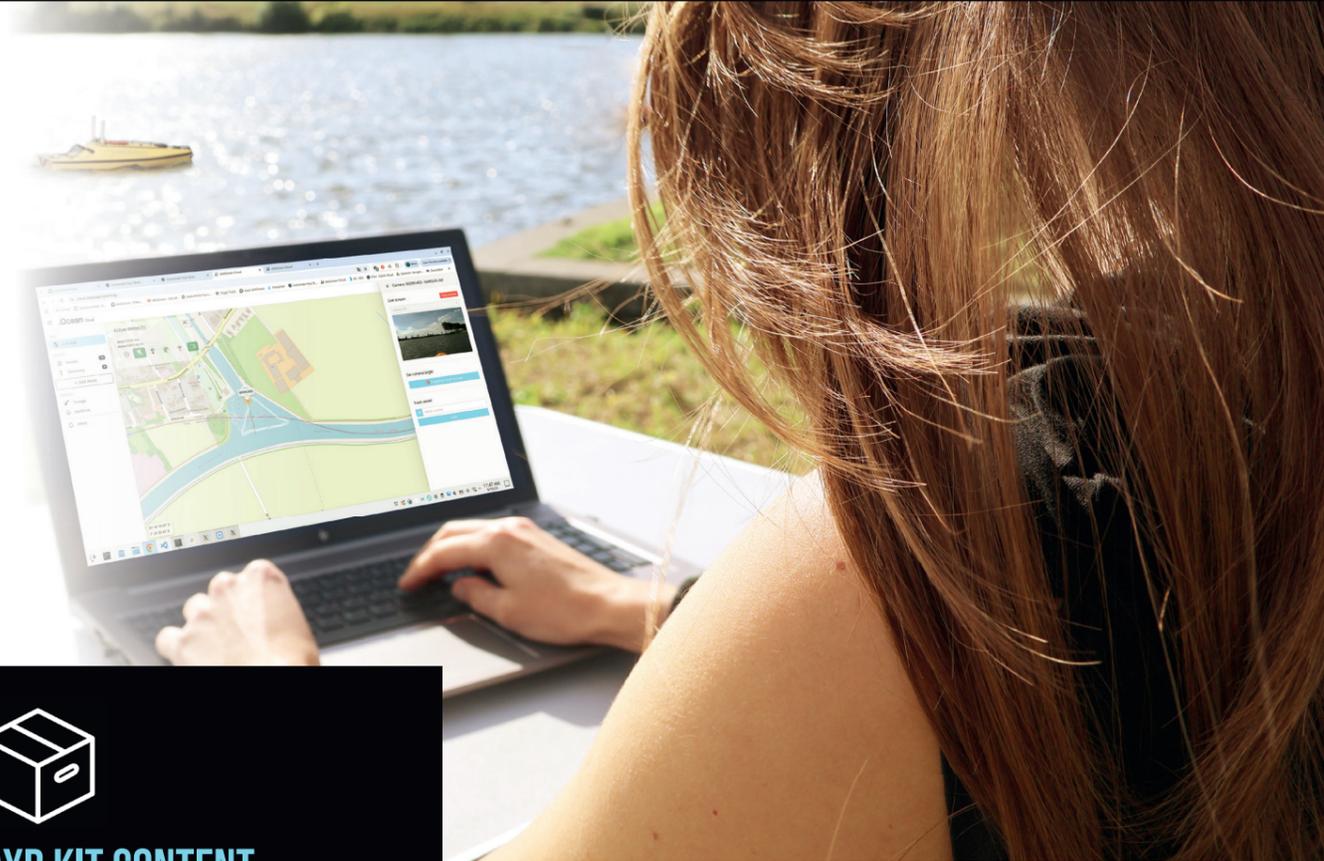
VLOS AND BVLOS REMOTE CONTROL

AUTONOMOUS NAVIGATION

COLLABORATIVE OPERATIONS

SMART INTEGRATION  
Easy integration with Navaq & Qinsy





## HOW TO AUTOMATE YOUR BOAT

<p><b>SELECT ENGINE CONFIGURATION</b></p>		<ul style="list-style-type: none"> <li>✓ Compatible with electric and fuel-powered engines for any vessel size.</li> <li>✓ Supports single thruster, rudder or differential thruster configurations.</li> <li>✓ Intelligent motor control ensures smooth navigation and precise maneuvering.</li> </ul>
<p><b>SENSOR &amp; SYSTEM INTERFACING</b></p>		<ul style="list-style-type: none"> <li>✓ Connects easily via NMEA 0183, NMEA 2000, RS232, RS485 or Ethernet.</li> <li>✓ Integrates GNSS, IMU, LiDAR, echo sounders and other marine sensors.</li> <li>✓ Enables real-time data fusion and cloud synchronization for full situational awareness.</li> </ul>
<p><b>SUPPORTED HULLS</b></p>		<ul style="list-style-type: none"> <li>✓ Compatible with catamaran, monohull, cataraft and other modular hulls</li> <li>✓ Designed for stability and performance in survey and inspection missions.</li> <li>✓ Adaptable to surface platforms for diverse operations.</li> </ul>
<p><b>CONNECT THE AYB UNIT</b></p>		<ul style="list-style-type: none"> <li>✓ Compact design for on-board or in-hull installation, depending on vessel layout.</li> </ul>
<p><b>PLAN &amp; EXECUTE MISSIONS</b></p>		<ul style="list-style-type: none"> <li>✓ Use the dotOcean Cloud &amp; AYB App for monitoring and mission planning.</li> <li>✓ Monitor in real-time, adjust routes and collect data remotely.</li> <li>✓ Access post-mission analytics through the cloud dashboard.</li> </ul>



### AYB KIT CONTENT

- AYB unit (in-hull or on-board)
- R/C controller
- Android tablet with AYB App pre-installed
- User manual
- Cloud Link subscription (mission prep, execution, visualization, storage, machine learning algorithms, free upgrades)
- Access to dotOcean cloud

#### Options

- Battery types
- Connector types (wet-mate or dry-mate)
- INS
- Tailored form design
- satellite connectivity (Starlink)

### SPECIFICATIONS

Internet	3G+/4G/5G - Starlink Satellite
Interfaces	RS232, RS485, PWM, NMEA 0183, NMEA 2000 + Ethernet
Power Consumption	< 20 W (excluding motors)
Voltage	12-48 Vdc
Protection	Galvanic shielded zones, over-voltage, reverse voltage & battery protection
Heading	NMEA HDG sentence, ±2° accuracy and 1Hz update rate
GPS position	NMEA GGA,RMC sentence, 1Hz update rate
R/C Controller	5 Channels
Receiver	4 - 8 Channels, PWM or S-bus



Go to our website and contact us for a demo!  
*[dotocean.eu](http://dotocean.eu)*

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