

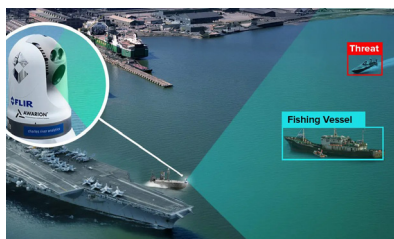


Passive sensing and perception

The Awarion® Autonomous Lookout System uses advanced AI and computer vision to detect, classify, localize, and track obstacles 24 hours per day with infrared and visible light cameras. Our AI-powered software system transforms any camera into a smart camera by making sense of what it sees and sharing the information through a map-based user interface designed to help crews analyze video data faster and respond more efficiently. Awarion enhances situational awareness and decision-making for crewed, uncrewed, and autonomous vessels.

Camera agnostic

Awarion is camera agnostic, so there is no need to buy new hardware if you've already invested in a set of cameras. Or we offer monthly leasing for hardware with your software package.



Maritime situational awareness

Awarion complements and supports human lookouts and marine radar systems for collision avoidance and safer navigation. The system addresses the limitations of radar- and acoustic-based systems, detecting and reporting on a variety of hazards and obstacles including whales, ships, sailing vessels, fishing buoys, navigational markers, and other equipment. Awarion's autonomous AI capabilities help you avoid vessel strikes, reduce costs, comply with COLREGS regulations and environmental requirements, and reduce crew time spent on highly manual and repetitive tasks.

Detecting what radar can't see and acoustics can't hear

Electro-optical and infrared (EO/IR) methods provide much greater detail and resolution than radar. With EO/IR, Awarion can see what radar can't see, such as a whale's blow or surfacing, and classifies objects in real time. Awarion technologies reduce or eliminate the need for onboard protected species observers (PSOs), allowing work to continue in darkness, fog, and other adverse conditions.

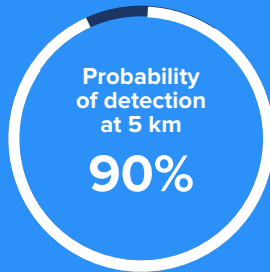


Performance metrics

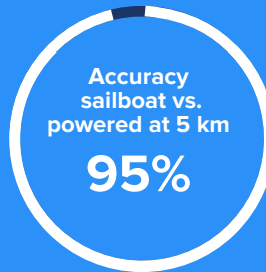
Based on testing with real-world data and targets



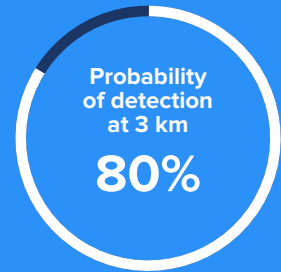
Ship detection



Vessel classification



Whale detection



Detection capabilities are affected by the type of camera used, weather conditions, and the size of the target.

Flexible configuration



Situational awareness analytics software

The Awarion product consists of a core software component, which can be delivered as a standalone product or as part of an integrated camera system.



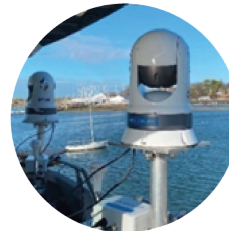
Camera agnostic

Awarion has been run successfully on a variety of camera models (e.g., FLIR M-Series, FLIR SUMIT360™, SeaFLIR®, Blackfly®, Boson, Current Corp, and Carnegie Robotics).



Pointable smart camera software

In addition to analyzing video, Awarion can control a PTZ camera to regularly sweep 360 degrees and zoom in to autonomously deliver follow-up observations.



Multi-camera integration

Multiple cameras with fixed views can have their output combined to form a constant 360-degree view.



Advanced user interface

Awarion's UI can be run locally or remotely and enables users to review and annotate objects of interest as the images are displayed on the map view.



Software updates

We regularly update Awarion's detectors with the newest deep neural network (DNN) architectures to improve accuracy and speed.

We can build a customized solution for you!

Awarion is available for an annual license or as a monthly lease. Pricing is based on selected configuration. First-time users can contact us for trial license terms.

Awarion is under active development. We are constantly expanding its capabilities through our research and development work. The annual license entitles you to upgrades as they are integrated into the Awarion product. If you have a particular feature that you are looking for, please connect with the Awarion team.

