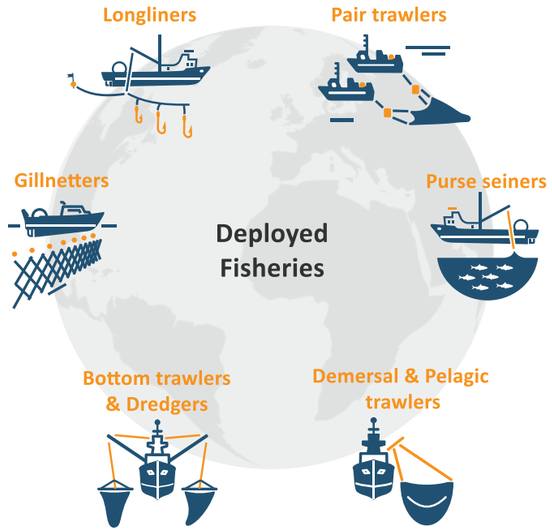
Adaptation worldwide

Anchor Lab's electronic monitoring ecosystem has been rolled out to cover the entire sector of various commercial fisheries globally. Anchor Lab is working in collaboration with a broad range of fisheries control, research agencies and industry partners to achieve the further adoption of electronic monitoring to support sustainable fishing practices.



Deployed locations:

Coming soon:

Anchor Lab
Copenhagen

Future perspective

Anchor Lab is continually looking to promote the adoption of electronic monitoring to aid in the understanding and stewardship of the marine environment.

A primary focus of **Anchor Lab** is the development and deployment of **Artificial Intelligence** (AI) to address challenges that can be faced by the wide adoption of electronic monitoring technology.

Part of **Anchor Lab's** efforts within the field of AI, will come through participation in the EU funded **EveryFish** project. The **EveryFish** project will develop, test, and deploy innovative technological solutions for fully automated catch registration and reporting. The **Black Box Video** system will be used for both data acquisition and integration platform of the **AI models** developed within the project.

Contact us:
Phone: **(+45) 48 48 15 53**
Email: info@anchorlab.net
Web: www.anchorlab.net

Black Box Video
Electronic Monitoring System
Building tools for a better tomorrow

Anchor Lab
Copenhagen

Fisheries resources and fish habitats are highly valued by their communities so it is important they are managed sustainably for the future.

Fisheries compliance is a key element in maintaining sustainable fisheries, whilst also facilitating engagement with NGOs and the public to enhance transparency in the sustainability of fishing activities.

Having accurate, reliable, and timely data is essential to be able to make the right decisions on the management of fishery resources.

The **Black Box Video** System is built around the **Black Box Analyzer** eco-system enabling easy real-time monitoring of vessels and near real-time data analytics.

Passively cooled unit

ensures a silent, durable, and unobtrusive system.

Ruggedized Equipment

Suitable for the marine environment. Integrating with almost any sensor incl. NMEA2000 and Marine scales.

Advanced Cameras

"Camera as a sensor" through motion and object detection along with privacy masks and automatic face blurring.

Robust Connectivity

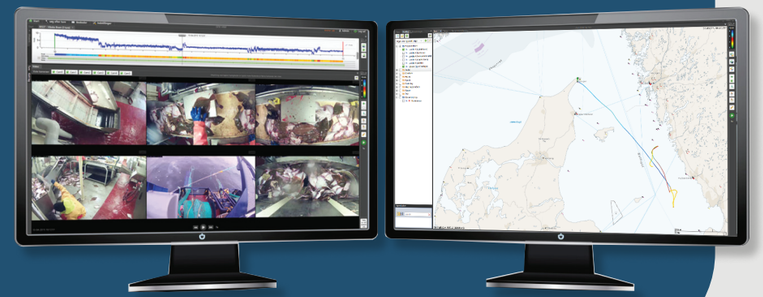
In-built LTE and Wi-Fi modules with the ability to connect via external satellite communication modules.

Edge Connectivity

Live view: Interact with the Black Box Video system remotely and securely, via the Black Box Analyzer, to aid in the configuration and maintenance of the system.

Live map: The system regularly reports system status and health information to facilitate an overview of the location and status of all systems.

Automatic updates ease the required maintenance from the fisher's and manager's perspective by ensuring the system firmware is kept up to date with the latest features.



Video On-Demand minimizes the quantity and cost of data to transfer and store at a centralized data storage.

A **robust video recording strategy** ensures the reliability of the video recording and protects against the loss of captured data.

Geofence zones and/or sensor activity can be used to automatically start and stop recording.

Edge AI

AI-powered hardware modules capable of running AI models more efficiently on edge devices can be incorporated.

Machine learning models are applied at sea to detect protected species, such as harbor porpoises, sharks, seals, and seabirds have been caught.

AI Analysis enables video data to be analyzed automatically with results fed into the Analyzers catch quantification module.

Fleet management

View the vessel positions and their health status in real-time and configure them remotely from within the Analyzer.

Data Visualization

View speed and sensor profiles, fishing activity, and video data availability within graphs and a Geographical Information System.

Customizable reporting

Export data to standard formats or create custom reports with direct access to all collected EM data to cross-reference against

Secure

The **Black Box Analyzer** incorporates role-based security and all client/server communication is encrypted.

Synchronized video playback of multiple video feeds, with the ability to adjust playback speed, zoom, and measure content within the video scene

The **Catch quantification** module together with snapshot images of individual fish can be used for stock assessment and research purposes.

Accurately measure individual fish from the 2D video imagery through a photogrammetric **measuring grid** that compensates for radial distortion.

Video-on-demand optimizes the data bandwidth usage by only uploading the video data of fishing activities to be reviewed.