

Hydrophones





Trawl Hydrophones

Scanmar's trawl hydrophones are developed in close cooperation with more than a thousand of fishing vessels, and are specifically designed for trawler applications.

The narrow vertical beam greatly improves the immunity to propeller noise, while the wide horizontal coverage simplifies operation.

A good hydrophone positioning is a key to a stable signal transfer between the sensor and the receiver; and there are several options here depending on the type of the vessel and purse seining. In general, a compromise is found between clear line of sight to the sensors, propeller noise, interference from other equipment and air bubbles under the hull.

For keeled vessels operating under difficult conditions, hydrophones can be mounted on the keel or in trunks specially produced for Scanmar.

In recent years it has become more common to install two sets of hydrophones (4 hydrophones in total-2 in front and two back) on new vessels for full coverage. This is in order to optimize the signal reception in difficult cargo and/or catch conditions.

Our hydrophones are available in two variants:

- Standard trawl hydrophone
- Standard trawl hydrophone with temperature sensor Under certain conditions, the temperature at the surface provides a good indication of the tempera ture profiles further down in the sea. By logging over time, this can give good estimates of the possible presence of fish.

Hydrophone for Purse Seines

This three-beam hydrophone is specifically designed for Purse Seine and Danish Seine fishing. The asymmetrical beam configuration enhances signal reception, while the narrow vertical beam pattern reduces effects of propeller noise.

A 10 degree overlap of the three horizontal plane sectors provides a total exposure of 250 degrees and full coverage of all stages of the fishing operation.

Scanmar's modern bridge systems are programmed to automatically select the best signal quality from one of the hydrophones on the vessel, ensuring most accurate measurements.



Technical specifications

Hydrophones for Trawl

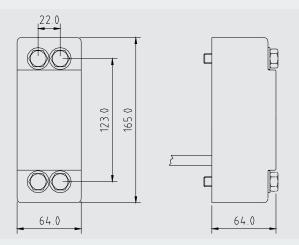
Frequency range ~ 40,8 - 44,8 kHz

Sensitivity $\sim 147 dBV/\mu Pa$

Beam width (3 dB) Horizontal 50° / Vertical 30°

Inclination angle Given by trunk TR-04 20°

25 m Cable length Length 65 mm Width 64 mm Height 64 mm



Hydrophones for Seines

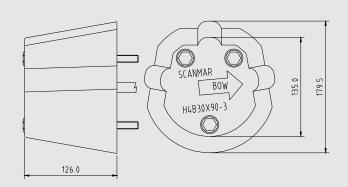
~ 40,8 - 44,8 kHz Frequency range

 $\sim 147 \text{ dBV/}\mu\text{Pa}$ Sensitivity

Horizontal total 250° / Vertical 30° Beam width (3 dB)

Set by hydrophone 10° Inclination angle

25 m Cable length 179,5 mm Length 177,5 mm Width 126 mm Height



Trunk for both Seines & Trawl

220 mm Height 324 mm Diameter Weight ~10 kg

