

TrawlSounder

Advanced echo sounder showing fish influx and volume

Measures the height of the trawl opening, whether the trawl is on the bottom and the distance between the trawl and the bottom

Applications: Pelagic trawl, bottom trawl, Danish/Scottish Seine

Ideal together with DoorSensors for showing a simplified trawl geometry



Advanced Echo Sounder

The TrawlSounder is an advanced echo sounder showing the height of the trawl opening, if the trawl is on the seabed and the distance between the trawl and seabed.

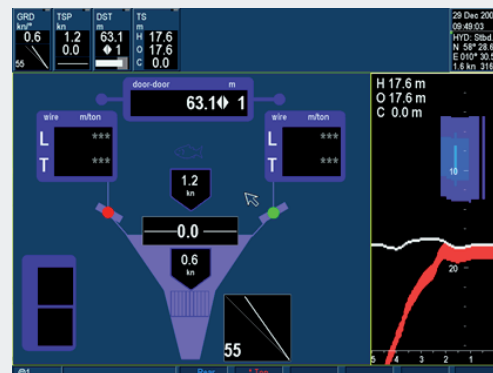
It also provides a simplified "sonar" that shows whether there is fish influx and the volume. Choose between "classic view" or "density view" on your Bridge System. Wireless monitoring of the trawl opening and intermediate section of the trawl has become a matter of necessity in many of the world's fisheries.

Mounted in the belly it shows whether the trawl height is stable, or if a bucket effect is arising and allowing fish to escape. It also shows the volume of fish passing through.

Together with a TrawlEye in the opening it is easy to see whether the fish seen entering the opening end up in the cod end.

Trawl Geometry

The TrawlSounder is ideal together with the DoorSensors and the TrawlSpeed / Symmetry sensor to get full control of the trawl's geometry.



The image shows a simple setup with a TrawlSounder, DoorSensors, TrawlSpeed / Symmetry and a GridSensor on a shrimp trawler.

The TrawlSounder shows how perfect the landing was, that the towing situation was stable, and the entrance of shrimp on the right side of the image.

Technical Specification

MEASUREMENTS

Trawl opening	1.5 – 150m
Clearance	1.5 – 150m
Fish density	0 – 9
Resolution	0.1m
Accuracy	± 3 %

OPERATION

Update rate trawl opening	Approx. 11 sec
Update rate clearance	Approx. 8 sec
Update fish density	Approx. 8 sec
Operation time	Approx 20 hrs.
Max. Depth	1200m

BATTERY

Type	NiCd, 2X12V / 600 mAh
Charging time	1,5 hour

UPLINK

Frequency range	38.9 – 43.4 kHz
Source level	190 dB // 1uPa @ 1m
Beam width	55 deg (- 3dB) ¹
Range to vessel	Approx. 2500 m

ECHO SOUNDER

Frequency	96 kHz
Beam width	40 deg

WEIGHT

In air	5.9 kg
In water	1.9 kg

MAIN DIMENSIONS

Length	246 mm
Width	224 mm
Height	104 mm

ENVIRONMENTAL

Storage	-20 to +55 °C
Waste treatment of sensor	According to WEEE-directive when the battery is taken out. The sensor should however be treated as hazardous waste when the NiCd battery is in place.

Approvals



Note: All specifications are subject to change without prior notice.

1 - Depends on acoustic conditions, ships noise, mounting and alignment of sensors and hydrophone.