

GridSensor

Used to fish more efficiently with grid

Measures the grid's angle, indicating the catch volume

Shows if the waterflow through the grid is blocked, resulting in loss of catch

Applicable for bottom and pelagic trawls



GridSensor

Sorting grids were first used in the shrimp fleet (*Pandalus Borealis*) at the end of the eighties. The aim was to fish for shrimp in fields with many small fish, but without taking the latter as a by-catch. In many countries there are regulations regarding trawling, and in some areas it is mandatory to use a grid in the cod end.

Use of GridSensor

The Scanmar GridSensor was developed to show the precise water flow through the grid, and also the grid's angle. The angle will give you a good indication of the filling in the cod end, and if the trawl has twisted.

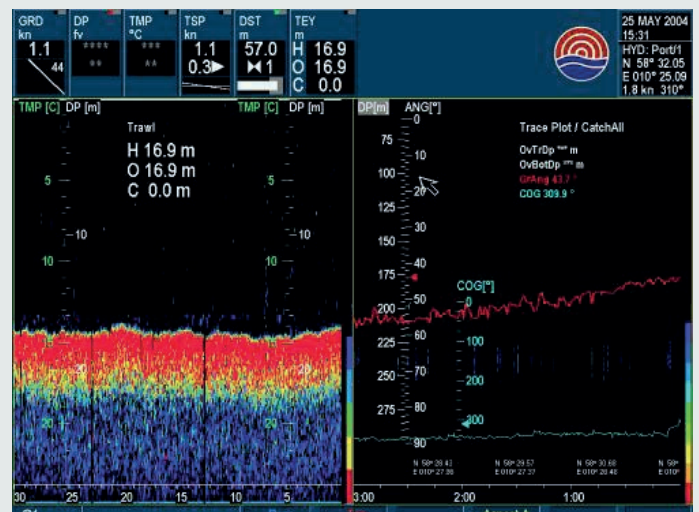
Water Flow

Water flow through the sorting grid is the most important observation. Not infrequently, the grid becomes blocked by skate, seals, shark, stones etc. In some seasons, big swarms of jellyfish seal the meshes in the cod-end, preventing water from flowing out. In these cases it is necessary to end the haul.

Grid Angle

Changes to the angle give a good indication of the catch volume at any time, and the logging curve also shows where the influx was greatest.

With shrimp (and fish without a swim bladder), the cod-end sinks as it fills up. It is therefore usual to start with an angle above 50 degrees and to finish towing when the angle approaches 37 or 38 degrees.



TrawlEye and GridSensor used on a small shrimp trailer. Shrimp influx can clearly be seen on the left side of the screen, which shows the TrawlEye. This can also be seen as blue marks on the GridSensor logging screen on the right. The grid angle has fallen (rising curve) from over 55 degrees to 44 degrees. The angle deflection corresponds to the shrimp influx.

Technical Specification

MEASUREMENT

Waterflow

Range	0 to 6 knots
Accuracy	± 10% of value (Min. ± 0.1 knots)

Angle

Range	± 30 °
Accuracy	± 1 °

OPERATION

Update rate	Approx. 25 sec
Max. depth	1200 m
Operation time	Approx. 30 hrs.

BATTERY

Type	NiCd, 2x12V / 600 mAh
Charging time	1.5 hour

WEIGHT

In air	7.3 kg
In water	2.4 kg

MAIN DIMENSION

Length	255 mm
Width	242 mm
Height	93 mm

UPLINK

Frequency range	38.9 – 43.4 kHz
Source level	190 dB // 1uP @ 1m
Beam width	Approx. 50 deg [-3dB]
Range to vessel	Approx. 2500 m ¹

AVAILABLE ACCESSORIES & SPARE PARTS

Mounting kit	104017
Battery pack	105485 (2 pcs)
Battery charger	QBC-X1

APPROVALS



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

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