

# SS4 DepthSensor

Multifunctional: measures depth, angle, temperature and upside/down

Correct & reliable information

Robust & innovative design, eliminating need for service

Negligible operation cost and long lifetime

Up to 700 h operation time



## SS4 DepthSensor

*The DepthSensor is an invaluable tool in trawling and Purse Seine fisheries, providing accurate information of the sinking speed and depth, which enables the skipper to decide when to start trawling/pursing.*

### Applications

- Purse Seine: one or several sensors on purse line for depth and sinking speed
- Tuna Seine: two depth sensors with temperature on purse line
- Pelagic trawl: DepthSensor on the headline with temperature, and one on the cod end
- Bottom trawl: DepthSensor on the headline, with temperature option

### User advantage

- Position the trawl at correct depth to target a shoal
- Mounted on the cod end – avoid a sinking bag when hauling a pelagic trawl
- Know when to start towing in the landing phase
- Purse seine – watch the sinking speed and depth using one or several DepthSensors
- Easily programmable for use under various conditions
- Add more functionality – upgrade with Temperature and Angle function

### Construction

The new design with double casting of the electronics provides 100% protection. Scanmar's newly developed super plastic drastically reduces damage to the sensor due to strokes, tension, or dragging along the bottom with a twisted trawl.

### Batteries, Charging & Programming

The new batteries have ten times as much capacity as the old batteries. The transmission power in the sensors can be adjusted depending on the depth at which one is fishing. This is something that in most cases, will lead to a further increase in operation time.

The sensor is always ready for use because a quick charge for a haul can be done in minutes, due to the improved battery capacity and increased time between charges.

The new SS4 is a durable multifunctional sensor which can be programmed in several configurations for multipurpose use. It can be upgraded to include other key functions, i.e. Angle (pitch & roll) and sea temperature.

# Technical Specification

## MEASUREMENTS & OPTIONS

### Depth

Range (full scale) <sup>1</sup>	300/600/1200/1800 m
Accuracy <sup>2</sup>	1 m

### Angle

Roll angle	-90° to +90°
Pitch angle	-90° to +90°
ScanFactor	0 to +20°
ScanFactor Pitch	0 to +20°
Accuracy	+/- 1°

### Temperature

Range	-5 to +30 °C
Accuracy	+/- 0.15 °C

### Upside/down

OK / Upside down

## OPERATION

Mounting positions	Net
Update rate	2.5 to 30 sec
Operation time <sup>3</sup>	100-700 hours
Maximum depth	1500 m continuously (2300 m for a short period) <sup>4</sup>

## BATTERY

Smart Battery	Li-Ion 10.8V / 7200 mAh
Charging time	Typ. 1.5 hour (QBC-X1/X4)
Battery capacity indicator	5 LEDs

## CONFIGURATION<sup>1</sup>

Channel selection (FID), Type of measurement, Power selection, Depth range and Upside down.

## WEIGHT

In air	6.1 kg
In water	2.5 kg

## UPLINK

Frequency range	38.9 – 43.4 kHz
Source level high power	189 dB //1uPa @ 1m
Source level medium power	186 dB //1uPa @ 1m
Source level low power	183 dB //1uPa @ 1m
Beam width	55 deg (- 3dB)
Transducer tilt <sup>5</sup>	20° upward
Range to vessel	Approx. 2500 m (high power)

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

1 - Programmable via PC or battery charger

2 - If calibrated twice per year

3 - Depends on power level, number of transmitting channels, telegram forms and transmitting frequency

4 - Operation below 1500 m, may however reduce the reliability and lifetime of the sensor

5 - Depends on power levels, acoustic conditions, ship noise, mounting and alignment of sensor and hydrophone