

SENSORS

Clump Sensor

TYPE **SS4-C-VTLA 144**

Accurate distance between the clump and both doors on twin and triple trawls.



- Accurate distance between clump(s) and both doors on twin and triple trawls
- Multifunctional: distance, angle, depth, temperature, tension and bottom contact
- Robust construction and plastic protect against damage and wear
- Up to 700 hours of operation time on the clump
- Quick charging

Extended distance measures

To avoid asymmetry when fishing with twin or triple trawls, it is important that the doors and the clump are in line. Information about the position of the doors and the clump in relation to each other is therefore essential.

Construction

The double casting of the electronics provides 100% protection. Scanmar's newly developed super plastic drastically reduces damage to the sensor.

Batteries and charging

With new long lasting lithium-ion batteries, charging is in many cases no longer an issue.

Available functions

DISTANCE	Distance to both doors and clump(s), distance between trawl wings
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DEPTH	Clump depth
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TEMPERATURE	Sea water temperature
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TENSION	Tension in wires
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ANGLE	Clump angle (roll and pitch)
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STABILITY	Clump stability (ScanFactor)
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BOTTOM CONTACT	Distance from gear to bottom
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Technical specifications

Distance

Range (clump – door)	0-350 m
Range (wing – wing)	0-600 m
Accuracy	± 0.5% of value

Angle

Roll angle	-90° to +90°
Pitch angle	-90° to +90°
ScanFactor roll	0° to +20°
ScanFactor pitch	0° to +20°
Accuracy	± 1°

Depth

Range (full scale)	300/600/1200/1800 m
Accuracy ¹	1 m

Temperature

Range	-5°C to +30°C
Accuracy	± 0.15°C

Bottom contact

Pitch angle	-90° to +90°
Accuracy	± 1°

Tension

Range	12 ton
Accuracy	± 60 kg
Repeatability	± 30 kg
Overload	48 ton

Operation

Mounting position	Clump, wing, or bottom contact
Mode	Master (only for wing mounting), slave (standard or extended)
Trawl	Double and triple trawl
Update rate	3 to 20 sec
Operation time ²	Up to 700 hrs (clump or wing), up to 1000 hrs (bottom contact)
Max. depth	1500 m continuously (2000 m for a short period ³)

Battery

Smart battery	Lilon 10.8 V / 7200 mAh
Charging time	Typ. 1.5 hour (QBC-X1)

Uplink

Frequency range	38.9 – 43.4 kHz
Source level	170 – 191 dB //1 uPa @ 1 m
Beam width	55° (~ 3 dB)
Range to vessel ⁴	Approx. 2500 m (max power)

Transponder

Frequency	144 kHz
Source level	168 – 193 dB //1 uPa @ 1 m
Beam width	60° (~ 3 dB)
Range	Up to 600 m

Configuration

FID, measurement type (telegram), mounting position, depth range and uplink & transponder transmit power.

Weight

In air	6.6 kg
In water	1.9 kg

Available accessories and spare parts

Mounting kit clump	110025
Mounting kit bottom contact	108775
Mounting kit wing	110170
Battery pack Lilon	105982
Battery charger	QBC-X1

Environmental

Storage	-20°C to 55°C
Waste treatment of sensor	According to WEEE-directive