## STAR ODDI

## Starmon compass

Heading, pitch & roll, 3D acceleration, pressure/depth and temperature logger Compact and robust, subsea compass and tilt recorder with large memory.

For monitoring heading direction, orientation, behavior and movements of submersible gear and underwater vehicles. Suitable for both short or long-term studies.



## Key features

- Compact with multiple sensors
- Reliable and accurate
- Fast response and large memory
- Vertical or horizontal placement
- Robust housing and high pressure survival

Required accessories Standard USB cable SeaStar Windows software Optional: Plastic attachment plate with bracket holders.

Various depth/pressure ranges Choose a calibration range up to:

50 m, 100 m, 200 m, 500 m, 1000 m, 2000 m or 4000 m **Contact Us** Email: sales@star-oddi.com Phone: +354 533 6060

Star-Oddi Ltd Skeidaras 12 210 Gardabaer Iceland

## **TECHNICAL SPECIFICATIONS**

Sensors	Compass heading, pitch & roll, 3D tilt/acceleration, depth/pressure, temperature
Size (Diameter x Length)	40 mm x 197 mm
Housing Material	Titanium
Weight	608 g in air / 388 g in water*
Heading Range	0-360°
Heading Resolution	0.1°
Heading Accuracy RMS (Route Mean Square)	+/-5 for tilt range 0-45° from horizontal or vertical position, +/-7° for tilt range 46-60° from horizontal or vertical position
Tilt Range	+/-90° for each axis X, Y and Z
Tilt Resolution	0.2°
Tilt Accuracy	+/-3° in all tilt positions
Acceleration Range	+/-3 g for each of the axis X, Y and Z
Acceleration Resolution	0.0025 g
Temperature Range	-2°C to +40°C (28°F to 104°F)
Extended Calibration Option	Up to 65°C (149° Fahrenheit)
Temperature Resolution	0.002°C (0.004°F)
Temperature Accuracy	+/-0.025°C (+/-0.045°F)
Temperature Response Time	2 seconds time constant (63% of full value)
Standard Depth Ranges	Choose between: 50 m, 100m, 200 m, 500 m, 1000 m, 2000 m, 4000 m
Depth Resolution	0.005% FS (full scale)
Depth Accuracy	+/-0.3% of selected range
Pitch Roll Accuracy	+/-2° for tilt range of 0-45° from horizontal or vertical position +/-3° for tilt range of 46-60° from horizontal or vertical position

Pitch and Roll Range	Pitch (X axis) +/-90°, Roll (Y axis) +/-180°
Pitch and Roll Resolution	0.1°
Pressure Tolerance	50m to 500m sensors = 100% higher than full scale calibration. 1000m, 2000m, 4000m = 50% higher. 11km if no pressure sensor present
Memory Type	FLASH
Memory Capacity	2.2 million measurements per sensor
Memory Capacity Bytes	66 million bytes
Sampling Interval	User defined in sec, min or hours
Fastest Measurement Interval	1 second
Multiple Intervals Option	User software offer multiple intervals definition within the measurement period, shifting between intervals
Multiple Intervals Option Communications	•
	measurement period, shifting between intervals USB 2.0 cable, connects between data logger and a PC
Communications	measurement period, shifting between intervals USB 2.0 cable, connects between data logger and a PC computer
Communications Computer Interface	measurement period, shifting between intervals USB 2.0 cable, connects between data logger and a PC computer USB 2.0 cable, for PC connection
Communications Computer Interface Battery Life	<ul> <li>measurement period, shifting between intervals</li> <li>USB 2.0 cable, connects between data logger and a PC computer</li> <li>USB 2.0 cable, for PC connection</li> <li>2 years*</li> <li>Factory replaceable. Heading sensor needs recalibration at</li> </ul>

\*If lighter weight is needed, the logger can be housed in anodized aluminium, weighing 393 g in air.

\*\*For sampling interval of 1 min. 10 sec. interval = 4.5 months, 2 sec. interval = 28 days. Warranty: 12 months. Specifications may change without notice.