

Starmon mini

Overview

Dimensions (diameter x length): 25mm x 130mm

Sensor: Temperature

Temperature Range: -2 to +40°C (up to 90°C optional)

Accuracy: +/-0.05°C

Depth Tolerance: plastic housing: 400m, titanium: 11,000 m

Memory Size: 350,000 measurements (memory increase optional)

Battery Life: 10 years (replaceable battery)

Housing Material: plastic or titanium



Description

Starmon mini is an underwater temperature recorder designed to withstand harsh environments. Starmon mini measures and records temperature and stores the data into its internal memory with a real-time clock reference for each measurement. Starmon mini submersible temperature logger is known for its high accuracy, reliability and durability. Each recorder is delivered with a calibration certificate.

The Starmon mini is supported by the SeaStar software and a PC Communication cable. In SeaStar, the user sets the start time, start date and sampling interval before starting the recorder. After the recorder has been recovered, Starmon mini is connected to a PC and the recorded data is uploaded into the SeaStar software. Results are displayed both in graphic and tabular form.

A set of PC communication cable and SeaStar software needs to be purchased with the first order. Starmon mini has a non-corrosive and robust plastic housing. For more extreme pressures/depths or higher temperatures, the Starmon mini is available in titanium housing. A stainless steel protective housing for extra protection is also available.

Features on Request

Star-Oddi offers Starmon mini with temperature calibration outside standard range, for high temperature measurements up to 90°C. The hi-temp recorder is supplied in titanium housing. An option for the housing is to have a 1/2" thread, to screw on pipelines.

Examples of Application

Starmon mini is designed as a submersible temperature logger for use in oceans, rivers and lakes. It can also be calibrated as a high temperature logger for specific projects. Starmon mini temperature recorder is suitable for studies in e.g.:

- Oceanography
- Limnology
- Aquaculture
- Ecology
- Hydrology
- Marine Biology
- Fisheries Research
- Geothermal and boreholes
- Oil and gas projects
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- Any environment where temperature measurements are required

Technical Specifications

Sensors	Temperature
Size (diameter x length)	25mm x 130mm
Housing material	Plastic or Titanium
Weight (in air/in water)	Plastic housing: 80g Titanium housing: 170g
Battery life	10 years
Memory type	Non-volatile EEPROM
Memory capacity bytes	524,063 bytes/ temperature 1.5 bytes
Memory extension option	787,500 or 1,048,500 bytes
Memory management	Custom programming
Temperature resolution	0.013°C (0.023°F)
Temperature accuracy	+/-0.05°C (0.09°F)
Temperature range	-2°C to +40°C (28°F to 104°F) Outside ranges available upon request
Temperature response time	Plastic: Time constant (63%) is 18 sec. and final value reached in 3 min. Titanium: Time constant (63%) is 6 sec. and final value reached in 1 min.
Data retention	25 years
Clock	Real time clock Accuracy +/-1 min/month
Sampling interval	From 1 second up to 90 hours
Number of different sampling intervals	1 or 2
Communications	9 pin RS-232C standard serial interface or USB

* For a sampling interval of 10 minutes. **For a 40°C (104°F) temperature step response in stirred liquid Specifications may change without notice.