

Tilt-Acceleration

Starmon Tilt

For profiling and long term

Advantages at glance

- Fast sampling and response
- Robust and durable
- Long life replaceable battery

Applications

- Movements
- Orientation
- Vibration

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Fast sampling and response Starmon Tilt can record acceleration and tilt in burst mode at up to 100 Hz (100 measurements per second). Different sampling rates within a measuring period are possible. The temperature sensor has a fast response of 2 seconds.

Robust and durable Starmon Tilt can withstand harsh conditions at great depths. The robust and non-corrosive titanium housing is easy to attach to gear. Holder brackets are available for attaching on flat surface.

Long life replaceable battery Depending on interval setup, the battery can last over a decade. The software does energy and memory calculations based on certain intervals and reports battery life status upon connection with Starmon Tilt.

Individually calibrated A calibration certificate is delivered with each instrument.

Technical specifications

Housing material	Titanium
Sensors	3-D acceleration (tilt), pressure (depth), temperature
Data logger size	Length 197 mm x diameter 40 mm
Weight	608g in air / 388g in water
Tilt range	+/-90° for each of the axis X, Y and Z
Tilt resolution	0.2° (inclination determination)
Tilt accuracy	+/-3°
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 available
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)
Depth range	Choose between: 50 m, 100m, 200 m, 500 m, 1000 m, 2000 m, 4000 m. 11km housing available without a pressure sensor
Depth resolution	0.01% FS (Full Scale) of selected range
Depth accuracy	+/-0.3% of selected range
Memory capacity	6.7 million measurements per sensor
Sampling interval	User defined in sec, min or hour Option for burst sampling at each interval: 5Hz, 10Hz, 20Hz, 50Hz or 100Hz Option to define multiple intervals within the measuring period
Attaching the logger	Attachment hole of 6 mm and two slots for strapping; each 12 mm wide and 0.8 mm deep
Communications	USB 2.0 cable, connects between data logger and a PC computer
Battery life	10 years*
Battery replaceable	Battery is replaceable using a soldering iron

*For a sampling interval of 2 min. 10 sec. interval = 2 years, 2 sec. interval = 179 days