

ACCURATE ADD-ON UNIT FOR WATER SAMPLING BOTTLES. SAMPLES WATER TEMPERATURE AND PRESSURE.



SeaTurtle 2. Electronic unit mounted in the "cradle".

- * Detects when bottle turns around and when lid closes
- * Accurately samples water temperature and pressure at bottle release depth. Presents data on OLED display
- * High contrast OLED display. Great visibility also in bright sunlight and darkness
- * Fits on virtually all types of water sampling bottles
- * NIST traceable Temperature sensor
- * No need to ever re-calibrate temperature sensor. Long term drift is max 0.03 C in +125 years
- * May also sample high resolution vertical Depth/Temp profiles
- * Transfers vertical profile data to customer's mobile via Bluetooth BLE

SeaTurtle 2 from Ocean Origo may easily be mounted on virtually any type of water sampler bottles. This autonomous add-on unit detects when the bottle releases (lid closes or bottle turns around) and accurately samples water temperature and water pressure at release depth. Data is presented on a high contrast OLED display. The operator controls the instrument using a small handheld magnetic 'pen'. SeaTurtle II automatically enters 'Sleep mode' when not active thus reducing power consumption to almost zero.

SeaTurtle 2 is a significant upgrade compared to original SeaTurtle:

- * May be configured to also take high-resolution vertical temperature profiles. Up to 4 Hz sampling
- * Data file read out via Bluetooth BLE
- * Improved temperature measurements. Outstanding long term stability. No need to ever re-calibrate sensor
- * Improved pressure sensor accuracy
- * Smaller size
- * Maximum depth range increased from 500 m to 700 m
- * Higher battery capacity and lower current consumption means much longer battery operation time
- * New display with better contrast for comfortable data read out also in darkness and in bright sun light

Max depth	700 m
Temperature	Range: -10 C to +50 C. Long term stability: max 0.03 C over 125 years. Resolution: 0.01 C. Accuracy: typ. +4 0.05 C. Repeatability: 0.01 C. Response time: 2-3 s. NIST traceable and ISO/IEC 17025 verified.
Pressure	Range: 1000 dBar. Resolution: 0.1 dBar. Non-linearity: max +/- 0.15 % FSR. Total error band incl. temp effects: max 0.7 % FSR. No hysteresis. Immediate response time. Port for calibration.
Size & weight	Electronic unit: D x L = 30 x 235 mm. Approx 150 g.
Power	Internal single lithium primary cell LS14500. Replaceable by user.
Communication	Handheld magnet 'pen' to configure, read out data, start instrument, etc.:
& Control	Bluetooth BLE for downloading profile data to mobile.
Scoop	SeaTurtle 2 unit including lithium battery cell, cradle, SeaTurtle string for connection to lid bottle, metal press-fit clamp, one set of standard size hose clips for mounting on bottle, handheld magnet 'pen' and manual.
Operation	Turn around: SeaTurtle detects when water bottle turns around.
	String: SeaTurtle II detects when water bottle turns around.
	 Close-to-bottom sampling: Customer may tie the SeaTurtle String to a weight. SeaTurtle detects when the weight hits the sea-floor, samples temperature and pressure (depth) and then presents data on the display. Profile data sampling interval user selectable from 250 ms to 8 s.