## **ALTUS** Advanced submersible altimeter

## Sediment monitoring in bays and estuaries

ALTUS allows to study mudflats or beach level variations according to tidal currents and swell.

This high frequency acoustic data logger is equipped with a 2 MHz transducer located on a light frame at a given distance from the seabed. ALTUS can be used as a tide gauge thanks to its accurate pressure sensor.

Easy to deploy:

Light and compact

 Fast wireless configuration and data collection thanks to a communication interface (Inductive Data Pencil) connected to the USB port of a PC using Winmemo software

## Use:

- Monitoring of erosion or sediment deposits in coastal waters, estuaries, ports and rivers
- Evaluation of the sediment volumes to dredge
- Shallow waters and muddy environments



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Data loggers

# ALTUS Advanced submersible altimeter

Sediment monitoring



### Main features:

- 4 programmable detection thresholds giving 4 altitude measurements simultaneously, depending on the sedimentation level ;
- Millimetric measurements of the elevation changes of the seabed ;
- Recorded parameters:
  - 4 distances from seabed,
  - 1 «maximum echo » value to validate the data,
  - 1 absolute pressure for water height and wave ;
- A dedicated screwing anchored tripod can be provided for the transducer.

DESIGNATION		ALTUS
Order code		60-07-024
Altitude	Range	20 to 200 cm
	Resolution	0.6 mm
	Accuracy	2 mm in the 20 to 70 cm range
		5 mm in the 20 to 200 cm range
	Acoustic frequency	2 MHz Beam 3.6°
Water height range		0 to 20m (maximum 30m depth)
		Accuracy <6 cm Resolution 0,8 cm
Time		Internal clock with calendar
Automatic start /stop		On/Off controlled by pressure sensor (burst mode avai- lable)
Sampling rate		Programmable from <1 second to 99 hours
Autonomy	Memory	Up to 8 months autonomy, sampling rate 5 mn
		Up to 4 years autonomy, sampling rate 5 mn
	Energy	Replaceable Lithium batteries
Mechanical features	Altus housing	Length 240mm x Ø 80 mm max.
	Тір	Length 300mm x Ø 20 mm
	Transducer	Length 300mm x Ø 58 mm
	Cable	Length 5.5 m x Ø 9mm
	Weight in air	2.6kg

### Examples of use

- Sedimentation and erosion rates assessment
- Mathematic models validation
- Harbour silting monitoring and estimation of the volumes to be dredged





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