



# SWALE OCEANOGRAPHIC



## ULTRACOMPACT PRECISION ECHOSOUNDER ECHOLOGGER ECT400

The **ECHOLOGGER** series are a family of compact sonar altimeters suitable for many different applications, such as:

- Altitude Measurement for Navigation
- Sediment Transportation Monitoring
- Bridge Scour Monitoring
- Harbour Security
- Wave/Tide Monitoring

### Precision Hydro-acoustic Echosounders



## Features

- Real-time backscatter data collection along full water columns
- Ultra compact
- Ideal for navigation of ROV/AUVs
- Serial interface (RS232, 485, 422)
- Compatible with Hypack, Topcon receiver, HydroPro (Trimble)
- Seacon underwater wet connector in place
- User friendly GUI software provided for instant image update
- Tilt sensor integrated ( option )
- Real-time backscatter data collection along full water columns
- Depth ratings: 100m - 1500m (6000m for autonomous version)



## Options

USB or RS-232, RS-422 or RS-485 data output (top or side connector)

Autonomous self-recording model

Integrated Tilt Sensor



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## Software

Dedicated control software is included though the echo sounder is also compatible with *Hypack*, *Topcon receiver*, or *HydroPro* and can be commanded via any terminal programme.

## Specifications

Acoustic Frequency	450 KHz
Beam width	5° Conical (- 3dB)
Transmit Pulse Width	10µsec – 200µsec (10µsec steps)
Ranges	0.15 – 100m
Housing	ECT400 - PVC ECS400 - Aluminium (anodised)
Connector	SEACON
Operating Depth	Standard - 100m, <b>ECT400-1500</b> - 1500m
Repetition (Ping)	10 Hz max
Sampling Rate	100 kHz
Water Column Resolution	>7.5 mm
Altimeter Range Resolution	<10 mm
Temperature Resolution	0.1 °C
Temperature Accuracy	0.5°C (- 10°C – +50°C)
Tilt sensor integrated (optional)	
Dual-axis, horizontal operation	± 90°
Inclination data accuracy	0.1
Digital Output Interface	RS-232, RS-485 or RS-422
Communication Speed Data	4800 – 115200 baud (115200 baud default)
Output Format	ASCII TXT, NMEA 0183, or user defined (optional)
Configuration and Data reading	Echologger Control Program or any terminal program
Operation Temperature	- 10°C – + 50°C
Power supply	8 - 75 Vdc, 2W max
Dimensions (excluding connector)	ECT400: D 56mm x L 85mm ECS400: D 55mm x L 70mm
Weight	ECT400 - 270g (PVC), ECS400 - 310g (Aluminium),
Other features	Hypack Compatible (NMEA), GPS integrated data

