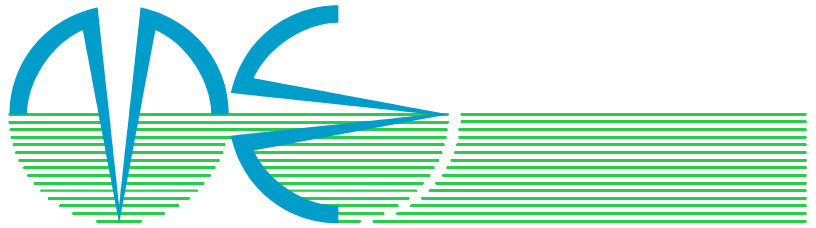


# INTERFEROMETRIC 3D PROFILER

MODEL 4250



250kHz Version

## FEATURES INCLUDE

- Range of frequency options.
- 400 Profiles per revolution.
- 6 Manual tilt head angles.
- Fully programmable for range, start / stop angles, power, pulse length etc.
- Live data capture or programmable.
- External viewable LED to show operating mode.
- Head Up / Head Down mounting options.
- Internal flash memory.
- Pitch & Roll / Heading sensor to correct data orientation.
- Optional Lander & Battery Pack.

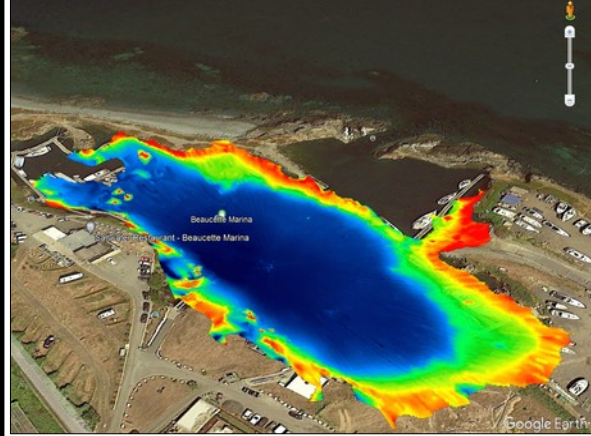
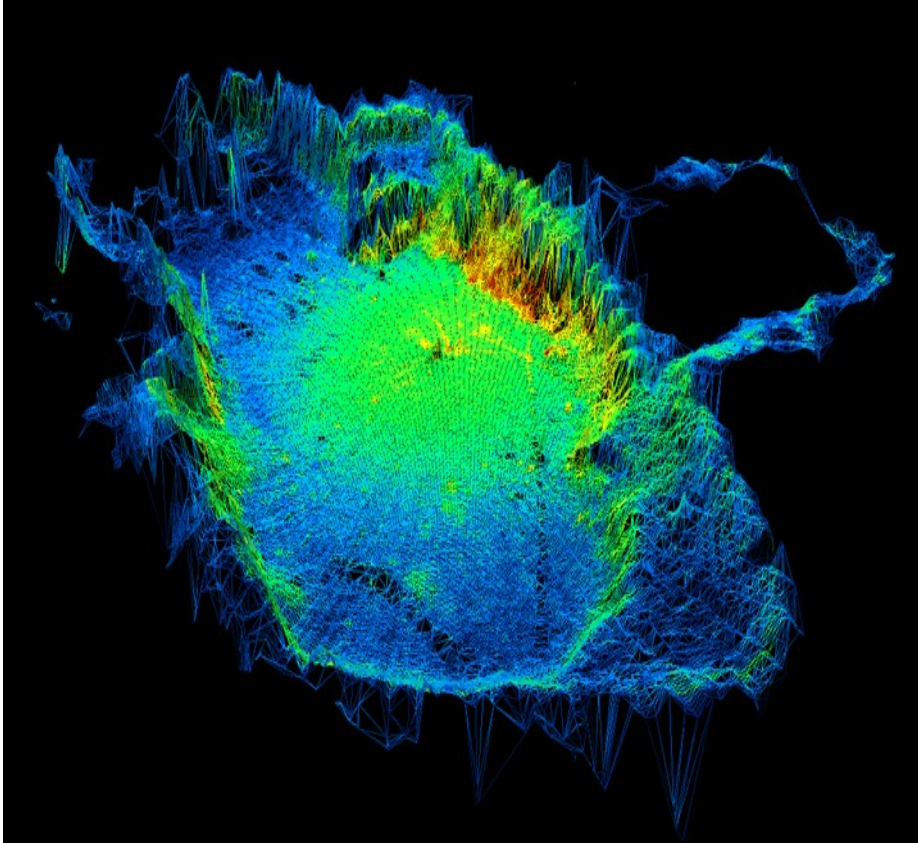
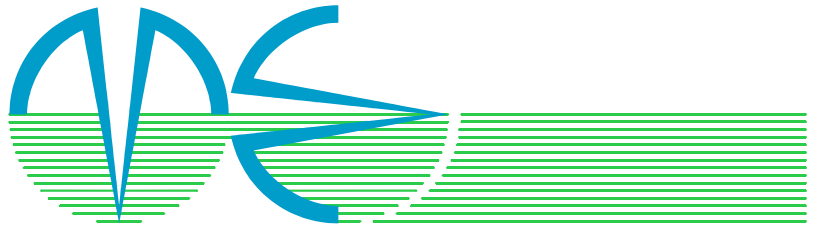
The Interferometric 3D Profiler is a single axis mechanically scanning sonar that can capture very high definition line profiles in the vertical plane with a narrow horizontal beam that is swept around the vertical axis in  $0.9^\circ$  increments giving up to 400 profiles per revolution. The sonar may be operated as a self-contained logging unit or operated live connected to a “Windows” computer. An optional sea-bed lander frame can be supplied which supports the sonar and a battery pack for autonomous deployment.

The sonar can be mounted either with the transducer array pointing upwards or downwards. The tilt angle of the transducer array is set manually prior to deployment to obtain the best coverage of the area to be scanned. The system is fully programmable for range, start and stop angles, power, pulse length, etc., and in self-recording mode the start, stop, wake-up interval times and number of sweeps per data-set can also be pre-set prior to deployment. An externally viewable LED indicator shows the current state of the system by flashing a coded sequence of green and red pulses.

The sonar may also be fitted with sensors to measure pitch, roll and compass heading which are monitored for each dataset and also stored in the data files.

# INTERFEROMETRIC 3D PROFILER

## MODEL 4250



### Specifications (250kHz Version)

**Operating Frequency** 250kHz

#### Dimensions

Transducer Array: 317 x 68 x 23mm  
Motor Housing:  $\varnothing$ 100 x 354mm  
Electronics Housing:  $\varnothing$ 127 x 394mm

**Material** Aluminium & Polyurethane

**Weight** 14kg

#### Beamwidth

Horizontal 1.3°  
Vertical 60°

**Max Depth Below Tx** 100m

**Maximum Coverage** 400m

**Range Resolution** 12mm

**Transmit Pulse Length** 10us to 1000us

**Maximum Depth** 500m

### Software

- The supplied Windows software can either control the sonar live or read in the files stored on the sonar's SD.
- A number of processing features are available in the software to filter the data and represent the output in 2D and 3D surface plots, ascan profiles and sector scan modes.
- Data can be exported to third party software for further manipulation and presentation.



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Specifications are subject to change without notice