

# D Profiler

## Autonomous Vertical Profiler



### Autonomous Vertical Profiling of the Water Column

D Profiler from Dartmouth Ocean Technologies (DOT) enhances water column surveys by collecting multiple sensor readings at a location defined by the user's Unmanned Surface Vessel (USV). The D Profiler is a dropsonde buoy with an adaptable and modular sensor capability that can transmit data via a variety of data channels – UHF radio and mobile phone.



### Features

- Programmable mission profiles
- Controlled subsea descent and ascent to a maximum depth of 200 meters
- Multiple water column profiles – up to 5, with programmable profile timing
- Robust communications: UHF Radio and mobile phone for real-time and/or stored data transmission
- Modular hardware design for mission adaptability
- Deploy from surface/subsurface craft
- Customizable for new requirements/sensors
- Mission manager operating system supports multiple software applications (e.g., controls and communications)
- Economical/low cost

# D Profiler - Autonomous Vertical Profiler

## Product Specifications

- Change of buoyancy causes the D Profiler to descend to a depth of 200m
- Making CTD measurements on decent
- Change of buoyancy causes D Profiler to ascend
- Making CTD measurements on ascent
- Data transfer back to ship or USV

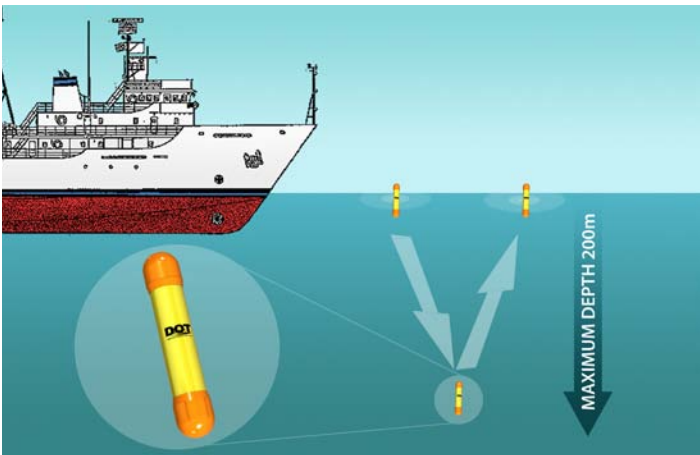
## Applications

- Deployment by hand from a ship
- Deployment by Unmanned Underwater Vehicles (UUV) using a D Launcher
- Deployment by Unmanned Surface Vehicle (USV) using a D Launcher



## D Profiler Models

Model DP 1	Model DP 2
Diameter: 70mm [2.75"] Length: 406 mm [16"] Weight: 1.27 kg [2.8 lbs]	Other variants in development



\* The profiler was developed by Boston Engineering Corporation



25 Parker Street, Suite 21401  
Dartmouth, Nova Scotia  
Canada B2Y 4T5  
sales@dartmouthocean.com  
DartmouthOcean.com