

Teledyne Oceanscience

# UnderwayCTD

## CTD Profiling from a Moving Vessel

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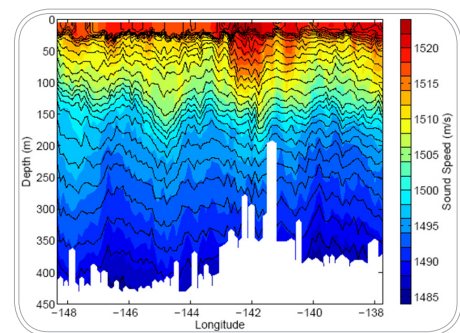
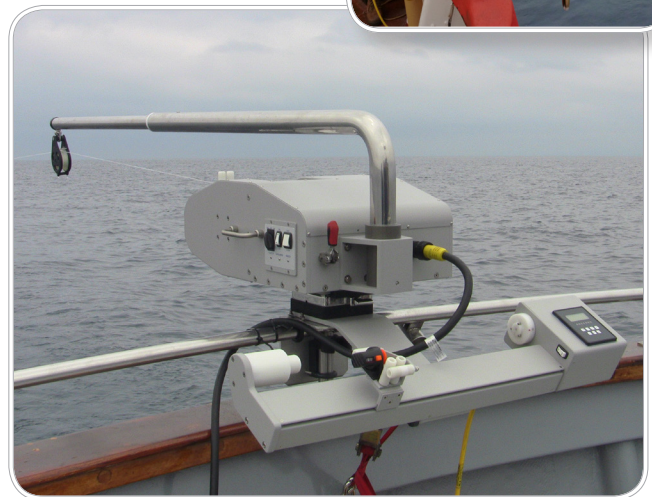
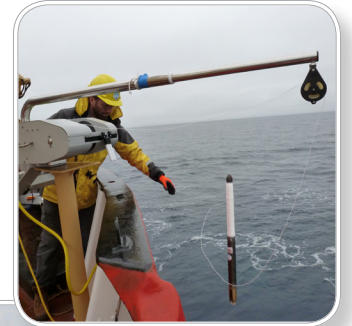
The Teledyne Oceanscience UnderwayCTD provides research-quality CTD profiles while underway for oceanographic research or hydrographic surveying applications. The unique freefall CTD probe affords vertical profiles to a maximum depth of over 1000m while underway, while stationary casts to over 1500m are also attainable. The probe is tethered to the ship by up to 2000m of high strength line, with a unique deployment winch and re-spooling mechanism that allows the probe to be recovered and relaunched time after time without ever needing to stop or slow down. Bluetooth communication between the probe and acquisition computer, managed by the Teledyne Oceanscience UCAST software package makes data handling easy and provides a fast turnaround between casts.

#### Maximize Productivity

Save hours of valuable ship time by eliminating the need to stop the ship for a conventional CTD station, avoid the use of labor intensive or depth-limited towed CTD profilers and maximize scientific productivity by gathering CTD data during transits.

#### PRODUCT FEATURES

- No need to stop the vessel for high quality CTD profiles
- Versatile and simple to use
- Small footprint allows installation on practically any vessel
- Lightweight for easy transportation
- No expendable components
- Several depth range configurations available
- Research grade conductivity and temperature data
- Fast 16Hz sampling rate
- Bluetooth data telemetry



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## TECHNICAL SPECIFICATIONS

### Winch

|                      |                          |
|----------------------|--------------------------|
| Length               | 61cm (24")               |
| Width                | 41cm (16")               |
| Height               | 23cm (9")                |
| Weight               | 34kg (75 lbs.)           |
| Input Voltage        | 24 VDC/ 1.5 kW           |
| Line Capacity        | 2000m                    |
| Construction         | Aluminum                 |
| Probe Recovery Speed | 0.5-2m/s (1.5-6.6 fps)   |
| Mount                | Swivel Base (13 x 13 cm) |
| Hardware             | Stainless Steel          |

### Rewinder

|               |                 |
|---------------|-----------------|
| Length        | 84cm (33")      |
| Width         | 18cm (7")       |
| Height        | 13cm (5")       |
| Weight        | 9.5kg (21 lbs.) |
| Input Voltage | 24 VDC          |

### Power Supply

|              |                       |
|--------------|-----------------------|
| Length       | 61cm (20")            |
| Width        | 41cm (16")            |
| Height       | 56cm (8")             |
| Input Power  | 90-264 VAC (47-63 Hz) |
| Output Power | 24 VDC/63 A           |

### CTD Probe

|                             |  |
|-----------------------------|--|
| Length (without tail spool) | 570mm (22")  |
| Diameter                    | 62mm (2.4")  |
| Weight (in air)             | 3.6kg (8 lbs.)                                       |
| Internal Memory             | 60 casts   |
| Depth Rating                | 2000m  |
| Conductivity Cell           | Glass flow-through with platinum reference           |
| Conductivity (S/m)          | Resolution 0.0005 / Accuracy 0.002-0.005 / Range 0-9 |
| Depth (dbar)                | Resolution 0.5 / Accuracy 1 / Range 0-2000           |
| Temperature (C)             | Resolution 0.002 / Accuracy 0.004 / Range -5-43      |
| Salinity (PSU)              | Resolution 0.005 / Accuracy 0.02-0.05 / Range 0-42   |

### Profiling Capability

|                          | Vessel Speed |       |      |      |      |       |
|--------------------------|--------------|-------|------|------|------|-------|
|                          | 0kts         | 2kts  | 4kts | 6kts | 8kts | 10kts |
| FREECAST                 | 1500m        | 1100m | 900m | 700m | 650m | 600m  |
| TOW-YO (no line on tail) | 1000m        | 700m  | 550m | 450m | 400m | 350m  |

Specifications subject to change without notice.  
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 March 2015