



# LEASE OCEANOGRAPHIC EQUIPMENT

Please contact us for rates and availability

INSTRUMENT
<b>RECORDING CURRENT METERS</b>
<b>Single Point Current Meters</b>
<b>TELEDYNE RDI Doppler Volume Sampler (DVS) 750.</b> Five bin short-range profiler. TRDI's version of a 'single point' Doppler current meter. With high-resolution Seabird temperature sensor. Max depth 750 m. <a href="#">(photo)</a>
<b>TELEDYNE RDI Doppler Volume Sampler (DVS) 6000.</b> Five bin short-range profiler. TRDI's version of a 'single point' Doppler current meter. Standard temperature sensor. Max depth 6000 m. <a href="#">(photo)</a>
<b>Nortek Aquadopp,</b> 2 MHz 3D Doppler current meter, with temperature & pressure (0-200 m). 2 MB memory. With stainless mooring cage, swivel and vane. <a href="#">(photo)</a>
<b>Nortek 10 MHz 3D Vectrino,</b> measures flow in small volume, at rates up to 25 Hz. Real-time only via 50 m cable. Upgradeable for turbulence measurements. <a href="#">(photo)</a>
<b>Sensordata SD-30</b> rotor/vane current meter, with temperature. Stores up to 30 readings; magnetically-activated LCD readout (no computer required). <a href="#">(photo)</a>
<b>JDC Electronics Flowatch</b> FL-K1 stream flow meter; handheld rod w/ impeller, LCD readout. <a href="#">(photo)</a>
<b>Profiling Current Meters</b>
<b>TELEDYNE RDI 75 kHz 'LongRanger' ADCP;</b> 2000 m pressure sensor; 4 alkaline battery packs; typical profile range to 500-600 m. Both DR and SC cases. <a href="#">(photo)</a>
<b>TELEDYNE RDI 150 kHz WH Sentinel 'Quartermaster' ADCP</b> either moored or vessel-mounted (BT/Transect); 2000 m pressure sensor; 4 alkaline battery packs; typical profile range to 200-350 m. <a href="#">(photo)</a>
<b>TELEDYNE RDI 300 kHz WH Sentinel ADCP</b> either moored or vessel-mounted (Transect); typical profile range to 100 m, bottom-track to 200 m; directional wave capable.
<b>TELEDYNE RDI 600 kHz WH Sentinel ADCP</b> either moored or vessel-mounted (BT/Transect); typical profile range to 50 m, bottom-track to 100 m; directional wave capable.
<b>TELEDYNE RDI 1200 kHz WH Sentinel ADCP "ZedHed"</b> (very small blanking, and bins as small as 1cm) with Mode 11. Either moored or vessel-mounted (BT/Transect) mode; typical profile range 20 m, bottom-track to 30 m; directional wave capable.
<b>TELEDYNE RDI V20 Sentinel ADCP.</b> Typical profile range 20 m; directional wave capable. 5 beams. 500 watt hour battery pack. <a href="#">(photo)</a>
<b>TELEDYNE RDI V50 Sentinel ADCP.</b> Typical profile range 50 m; directional wave capable. 5 beams. 500 watt hour battery pack. <a href="#">(photo)</a>
<b>TELEDYNE RDI 2000 kHz StreamPro ADCP</b> With boat/float, compass, iPAQ Pocket_PC, Bluetooth wireless, extended 6 m profiling range, WinRiverII & Section-by-Section software. <a href="#">(photo)</a>
<b>TELEDYNE RDI RiverRay ADCP (600 kHz phased array).</b> For Transects in 0.4-40 m water depths. Upgraded compass. Garmin 17xHVS GPS w/ WAAS ( $\pm 3$ m). Comes with trimaran boat and Software. <a href="#">(photo)</a>
<b>Ancillary Equipment</b>
<b>External Battery case for TELEDYNE RDI ADCP</b> (includes two WH battery packs & Y-cable).
<b>External Battery Case for TELEDYNE RDI Sentinel V ADCP</b> (includes two WH battery packs & cable).

<b>INSTRUMENT</b>
<b>External Battery with housing for TELEDYNE RDI ADCP LongRanger or QM</b> (includes four battery packs & Y-cable).
<b>Mooring cage for ADCP or Ice Profiling Sonar</b> (Dual cage). Holds up to 8 Viny floats. <a href="#">(photo)</a> Syntactic floats available for deep water applications.
<b>OceanScience Barnacle trawl-resistant bottom mount</b> , with gimbal for Teledyne RDI WHADCP. <a href="#">(photo)</a>
<b>External Battery for Nortek ADCP</b> (540 W-Hr).
<b>Gimbaled Bottom Mount</b> for ADCP, etc (ASL-GBM). <a href="#">(photo)</a>
<b>Non-gimbaled Bottom Mount</b> (3 ft) (for ADCP, etc). <a href="#">(photo)</a>
<b>Non-gimbaled Bottom Mount</b> (5 ft 'LowPro5') (for ADCP, etc). <a href="#">(photo)</a>
<b>Non-gimbaled Bottom Mount</b> (7'x9' ft); for ADCP, IPS, with space for MSI release activated pop-up (not included).
<b>Aluminum Bracket</b> (boat mount for use with Direct-Reading mode ADCP).
<b>25 m ADCP cable</b> w/ 48 VDC power supply for real-time.
<b>100 m ADCP cable</b> w/ RS422-RS232 converter and 48 VDC power supply for real-time.
<b>WAVE &amp; TIDE GAUGES (Non ADCP)</b>
<b>ASL 420 kHz Wave Sonar</b> ; 150 m range. Uses acoustic range to surface for direct measurement of water level/wave height. 2-month battery pack included. <a href="#">(photo)</a>
<b>RBR Ltd. Virtuoso Wave &amp; Tide gauge</b> , large battery capacity, 1-6 Hz sampling, 25 m range. <a href="#">(photo)</a>
<b>RBR Ltd. XR-420TG Tide gauge</b> , 90 m working depth. Averaging for wave removal. Comes with temperature sensor.
<b>RBR Ltd. TGR-1050P Tide gauge</b> , 20 or 50 m working depth. Averaging.
<b>RBR Ltd. DR-1050 Submersible pressure gauge</b> ; 0-90 m range. [no averaging]
<b>ACOUSTIC RELEASES &amp; DECK BOXES</b>
<b>EdgeTech Model AMD200R acoustic deck unit</b> for use with all LF Edgetech releases (CART, PORT, SPORT & 8242XS); range & orientation capable. <a href="#">(photo)</a>
<b>EdgeTech PACS LF acoustic deck unit</b> for use with al LF Edgetech releases (CART, PORT, SPORT & 8242XS acoustic releases). 20 m cable. <a href="#">(photo)</a>
<b>EdgeTech Model 8011M acoustic deck unit</b> for use with all LF Edgetech releases (CART, PORT, SPORT & 8242XS), range & orientation capable. <a href="#">(photo)</a>
<b>EdgeTech CART LF acoustic releases</b> ; can be used in tandem. Requires AMD200R, PACS or 8011 deck box. <a href="#">(photo)</a>
<b>EdgeTech PORT LF acoustic release</b> ; can be used in tandem. Requires AMD200R, PACS or 8011 deck box. <a href="#">(photo)</a>
<b>EdgeTech SPORT LF acoustic release activated pop-up buoy</b> . Requires AMD200R, PACS or 8011 deck box.
<b>EdgeTech Tandem assembly</b> for PORT or CART releases. <a href="#">(photo)</a>
<b>Pop-up rope canister &amp; Viny float</b> for EdgeTech acoustic release. Various rope lengths available. <a href="#">(photo)</a>
<b>ACOUSTIC PINGERS, TRANSPONDERS &amp; DECK BOXES</b>
<b>Benthos/Datasonics acoustic transponder</b> , UAT-376EL.
<b>Benthos/Datasonics transponder interrogator</b> DRI-267A; provides range & bearing; diver or surface readout (via cable to ACU-266 or Pocket PC - extra) <a href="#">(photo)</a>
<b>Benthos transponder receiver deck box</b> ACU-266
<b>RuggedReader Mobile Pocket PC</b>

<b>INSTRUMENT</b>
<b>Benthos acoustic pinger ALP364A/EL</b> , 27 kHz, 0.125W. ( <a href="#">photo</a> )
<b>Benthos acoustic pinger ALP364A/EL</b> , 37 kHz, 0.125W
<b>Benthos pinger receiver DPL-275XS</b> for surface or diver use. 5-80 kHz range. ( <a href="#">photo</a> )
<b>JW Fishers SFP1 acoustic pingers</b> . 32 kHz ( <a href="#">photo</a> )
<b>RJE Int'l PRS-275 pinger receiver</b> for surface or diver use. 5-80 kHz range. ( <a href="#">photo</a> )
<b>Sonotronics ManTrack pinger receiver</b> with omni- and directional-hydrophones. 27-100 kHz. ( <a href="#">photo</a> )
<b>Oceanetics Measurement Ltd. pinger receiver</b> . 27, 37 & 45 kHz settings. Omni-directional hydrophone. ( <a href="#">photo</a> )
<b>Sonotronics EMT03AR Tilt-Pingers</b> , 37kHz; ping rate switches from 1- to 2-Hz when tilt exceeds 15 degrees. Requires pinger receiver. ( <a href="#">photo</a> )
<b>WATER QUALITY (Temperature, Salinity, Pressure, Dissolved Oxygen, Turbidity, Chlorophyll)</b>
<b>RBR Ltd. XR-620 CTD</b> . (740 m max) with optical 4330 Optode Dissolved Oxygen (6 sec response), Seapoint Turbidity & Fluorometer. Comes w/ SS cage. ( <a href="#">photo</a> )
<b>Plastic cage for RBR CTD's</b> (no effect on inductive C-cell)
<b>RBR Ltd. XR-420 CTD+Optode DO</b> . (300 m max) with optical 3835 Optode Dissolved Oxygen (25 sec response). ( <a href="#">photo</a> )
<b>RBR Ltd. XR-420 CTD</b> . Light and compact. ( <a href="#">photo</a> )
<b>RBR Ltd. Concerto CTD</b> . Light and compact.
<b>RBR Ltd. XR-420 CTD+Tu</b> . (250 m max) With Seapoint turbidity sensor.
<b>RBR Ltd. Concerto CTD+Tu</b> . (740 m max) With Seapoint turbidity sensor. Fast, 6 Hz.
<b>RBR Ltd. Concerto CTD w/ Paros Pressure (700 m)</b> .
<b>RBR Ltd. Concerto CTD+Rinko DO</b> . Fast thermistor; 6 Hz sampling.
<b>RBR Ltd. Concerto CTD. Fast 6Hz; Twist On/Off; Wi-Fi</b>
<b>RBR TR1050P Temperature Loggers</b> .
<b>RBR SOLO-T Temperature Loggers</b> .
<b>SeaBird 37SM(P) CTD</b> .
<b>JFE Advantech Alec Compact CLW-USB logger</b> , w/ Chlorophyll, turbidity & temperature. (250 m max) With wiper. ( <a href="#">photo</a> )
<b>JFE Advantech Alec AROW2-USB Rinko DO logger</b> , w/ temperature. With wiper.
<b>Campbell Scientific - D&amp;A Instrument Co. OBS-3A Turbidity Sensor</b> ; self-contained for moored or profiling; w/ pressure. [s/n125, 0-2000 NTU, 0-40 m] [s/n126, 0-1000 NTU, 0-90 m] [s/n180, 0-1000 NTU, 0-190 m] 25 & 30 m cables available (call). ( <a href="#">photo</a> )
<b>SONAR (Scanning, Ice Profiling)</b>
<b>ASL Ice Profiling Sonar IPS-5</b> . 420 kHz, measures ice draft at 1-2 Hz sampling for periods up to 9 months. ( <a href="#">photo</a> )
<b>ASL Shallow Water Ice Profiler SWIPS</b> . Internal battery. Typically 20 m range. ( <a href="#">photo</a> )
<b>ASL Acoustic Zooplankton Fish Profiler AZFP</b> . Four frequency: 125-200-455-769 kHz.

<b>INSTRUMENT</b>
<b>ASL Acoustic Zooplankton Fish Profiler AZFP.</b> Four frequency: 38-125-200-455 kHz.
<b>ASL Acoustic Zooplankton Fish Profiler AZFP.</b> Four frequency: 38-70-125-200 kHz.
<b>Imagenex 881A scanning sonar;</b> real time via 15 m cable, or with custom IRIS data logger (below). Variable frequency (310 kHz to 1 MHz) and gain settings. Switchable RS232 or RS485 (for ROV's). ( <a href="#">photo</a> )
<b>ASL IRIS Data Logger for Imagenex 881A Sonar (above).</b> Stores files in raw Imagenex format. Operating software allows multiple/burst scans. ( <a href="#">photo</a> )
<b>SUBSURFACE FLOTATION, MARKER BUOYS</b>
<b>OpenSeas SubsA2</b> (low-drag torpedo w/ two 12B3 Viny floats). Standard configuration is to hold a TELEDYNE RDI WH ADCP. ( <a href="#">photo</a> )
<b>OpenSeas SubsB3</b> (low-drag torpedo w/ three 12B3 Viny floats).
<b>MSI Ellipsoid Buoy EB-F-P5 for WH ADCP.</b> Low drag. Holds WH ADCP. ( <a href="#">photo</a> )
<b>Nautilus Vitronex 17" Glass Float,</b> with hardhat & Eddy Grip; 57 lb net buoyancy, 6700 m.
<b>Benthos 17" Glass Float</b> w/hardhat, 48 lb buoyancy, 6700 m.
<b>Viny Float, 12B3,</b> 20 kg buoyancy, 200 m. ( <a href="#">photo</a> )
<b>Flotation Technologies M40.</b> For ADCP. Syntactic foam, 1500 m rated, 418 lb net buoyancy. ( <a href="#">photo</a> )
<b>Flotation Technologies CF-12HD</b> bolt-on cable float. Syntactic foam, 1500 m rated, 6 lb net buoyancy. ( <a href="#">photo</a> )
<b>NAVIGATION, GPS, ECHOSOUNDER</b>
<b>Garmin 525S</b> GPS with dual frequency echo sounder (50, 200 kHz). GPS is WAAS enabled for differential corrections. Serial output of lat, long and depth. ( <a href="#">photo</a> )
<b>Furuno satellite compass SC-30.</b> Great for the arctic or anywhere a regular compass is unreliable. NMEA output. With RD33 digital display. ( <a href="#">photo</a> )
<b>Pentax PTX-PRO Differential GPS,</b> w/ Ashtech G12 GPS board.
<b>KVH Digital Compass</b> self-calibrating, c/w display & RS-232 output.
<b>SATELLITE BEACONS, VHF &amp; FLASHERS</b>
<b>Novatech AS900A ARGOS satellite beacon.</b> Transmits location via satellite when mooring on surface. Extra charge for transmissions. ( <a href="#">photo</a> )
<b>XEOS Kilo Iridium beacon.</b> (satellite usage costs extra)
<b>XEOS XMi-11k Iridium beacon.</b> 11,000 m rated. (satellite usage costs extra)
<b>Metocean Data Systems RF700C6 RF Beacons.</b> RF transmission and flashing light when on surface. ( <a href="#">photo</a> )
<b>DF500N hand-held direction finding receiver.</b> ( <a href="#">photo</a> )
<b>OTHER FIELD &amp; SAMPLING EQUIPMENT</b>
Drogued Drifter, w/ Garmin GPS
<b>FTS weather station.</b> Self-contained; 10 m mast, with wind speed & direction, temperature, humidity, solar panel/battery. ( <a href="#">photo</a> )
<b>Airmar Ultrasonic Weather Stn 220WX</b>

## INSTRUMENT

**Niskin bottle.** General Oceanics Model 1010, 2.5 liter. ([photo](#))

**Ponar Grab Sampler “petite”, small.** 6”x6” all stainless.

**Ponar Grab Sampler, large.** 9”x9” all stainless.

**Brooke Ocean Technology BOT-Wing** type 970 with mounting bracket for TRDI Sentinel ADCP or RBR XR-620 CTD with DO, Chl-a and turbidity. ([photo](#))

**ASD FieldSpec HandHeld2 spectrometer (325-1075 nm).** Field spectro-radiometer for collecting spectral measurements in the field. ([photo](#))

**Kahl Scientific meter wheel.** For ¼” wire rope. 6” or 12” With counter.

**Jeamar capstan; 220 VAC.**

**We Accept Payment by MasterCard or VISA**

### **ASL Environmental Sciences Inc.**

#1-6703 Rajpur Place, Victoria, BC, Canada V8M 1Z5

phone: 250-656-0177 toll free: 1-877-656-0177 (North America only)

e-mail: [asl@aslenv.com](mailto:asl@aslenv.com) [rbirch@aslenv.com](mailto:rbirch@aslenv.com) web: [www.aslenv.com](http://www.aslenv.com)