

LEASE OCEANOGRAPHIC EQUIPMENT

Please contact us for rates and availability

INSTRUMENT

RECORDING CURRENT METERS

Single Point Current Meters

<u>TELEDYNE RDI Doppler Volume Sampler (DVS) 6000.</u> Five bin short-range profiler. TRDI's version of a 'single point' Doppler current meter. Standard temperature sensor. Max depth 6000 m.

<u>Nortek Aquadopp.</u> 2 MHz 3D Doppler current meter, with temperature & pressure (0-200 m). 2 MB memory. With stainless mooring cage, swivel and vane.

Nortek 10 MHz 3D Vectrino, measures flow in small volume, at rates up to 25 Hz. Real-time only via 50 m cable. Upgradeable for turbulence measurements.

JDC Electronics Flowatch FL-K1 stream flow meter; handheld rod w/ impeller, LCD readout.

Profiling Current Meters

TELEDYNE RDI 75 kHz 'LongRanger' ADCP; 2000 m pressure sensor; 4 alkaline battery packs; typical profile range to 500-600 m. Both DR and SC cases.

<u>TELEDYNE RDI 150 kHz WH Sentinel 'Quartermaster' ADCP</u> either moored or vessel-mounted (BT/Transect); 2000 m pressure sensor; 4 alkaline battery packs; typical profile range to 200-350 m.

TELEDYNE RDI 300 kHz WH Sentinel ADCP either moored or vessel-mounted (Transect); typical profile range to 100 m, bottom-track to 200 m; directional wave capable.

TELEDYNE RDI 600 kHz WH Sentinel ADCP either moored or vessel-mounted (BT/Transect); typical profile range to 50 m, bottom-track to 100 m; directional wave capable.

TELEDYNE RDI 1200 kHz WH Sentinel ADCP "ZedHed" (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.

<u>TELEDYNE RDI V50 Sentinel ADCP.</u> Typical profile range 50 m; directional wave capable. 5 beams. 500 watt hour battery pack. (photo)

<u>TELEDYNE RDI 2000 kHz StreamPro ADCP</u> With boat/float, compass, Bluetooth wireless, extended 6 m profiling range, WinRiverII & Section-by-Section software.

<u>TELEDYNE RDI RiverRay ADCP (600 kHz phased array).</u> For Transects in 0.4-40 m water depths. Upgraded compass. Garmin 17xHVS GPS w/ WAAS (± 3m). Comes with trimaran boat and Software.

TELEDYNE RDI Oceanscience Q-Boat. Remote controlled surface vessel, 1800, with RiverRay or RiverPro.

Ancillary Equipment

External Battery case for TELEDYNE RDI ADCP (includes two WH battery packs & Y-cable).

External Battery Case for TELEDYNE RDI Sentinel V ADCP (includes two WH battery packs & cable).

Ancillary Equipment (continued)

External Battery with housing for TELEDYNE RDI ADCP LongRanger or QM (includes four battery packs & Ycable).

Mooring cage for ADCP or Ice Profiling Sonar (Dual cage). Holds up to 8 Viny floats. Syntactic floats available for deep water applications.

External Battery for Nortek ADCP (540 W-Hr).

Gimbaled Bottom Mount for ADCP, etc (ASL-GBM).

MSI Gimballed Tripod for ADCPs.

Non-gimbaled Bottom Mount (3 ft) (for ADCP, etc).

Non-gimbaled Bottom Mount (5 ft 'LowPro5') (for ADCP, etc).

Non-gimbaled Bottom Mount (7'x9' ft); for ADCP, IPS, with space for MSI release activated pop-up (not included).

Aluminum Bracket/Mast (boat mount for use with Direct-Reading mode ADCP).

25 m ADCP cable w/ 48 VDC power supply for real-time.

100 m ADCP cable w/ RS422-RS232 converter and 48 VDC power supply for real-time.

WAVE & TIDE GAUGES (Non ADCP)

SOFAR Spotter Buoy. Real-time directional wave measurements.

ASL 420 kHz Wave Sonar; 150 m range. Uses acoustic range to surface for direct measurement of water level/wave height. 2-month battery pack included.

RBR Ltd. Virtuoso Wave & Tide gauge, large battery capacity, 1-6 Hz sampling, 25 m range.

RBR Ltd. XR-420TG Tide gauge, 90 m working depth. Averaging for wave removal. Comes with temperature sensor.

RBR Ltd. TGR-1050P Tide gauge, 20 or 50 m working depth. Averaging.

RBR Ltd. DR-1050 Submersible pressure gauge; 0-90 m range. [no averaging]

ACOUSTIC RELEASES & DECK BOXES

EdgeTech Model AMD200R acoustic deck unit for use with all LF Edgetech releases (CART, PORT, SPORT & 8242XS); range & orientation capable.

EdgeTech PACS LF acoustic deck unit for use with all LF Edgetech releases (CART, PORT, SPORT & 8242XS acoustic releases). 20 m cable.

EdgeTech Model 8011M acoustic deck unit for use with all LF Edgetech releases (CART, PORT, SPORT & 8242XS), range & orientation capable.

EdgeTech CART LF acoustic releases can be used in tandem. Requires AMD200R, PACS or 8011 deck box.

Edge Tech PORT LF acoustic release can be used in tandem. Requires AMD200R, PACS or 8011 deck box.

EdgeTech SPORT LF acoustic release activated pop-up buoy. Requires AMD200R, PACS or 8011 deck box.

EdgeTech Tandem assembly for PORT or CART releases.

Pop-up rope canister & Viny float for EdgeTech acoustic release. Various rope lengths available.

ACOUSTIC PINGERS, TRANSPONDERS & DECK BOXES

Benthos/Datasonics acoustic transponder, UAT-376EL.

<u>Benthos/Datasonics transponder interrogator</u> DRI-267A; provides range & bearing; diver or surface readout (via cable to ACU-266 or Pocket PC - extra)

Benthos transponder receiver deck box ACU-266

ACOUSTIC PINGERS, TRANSPONDERS & DECK BOXES (continued)

Benthos acoustic pinger ALP364A/EL, 27 kHz, 0.125W.

Benthos acoustic pinger ALP364A/EL, 37 kHz, 0.125W

Benthos pinger receiver DPL-275XS for surface or diver use. 5-80 kHz range.

JW Fishers SFP1 acoustic pingers. 32 kHz

RJE Int'l PRS-275 pinger receiver for surface or diver use. 5-80 kHz range.

Sonotronics ManTrack pinger receiver with omni- and directional-hydrophones. 27-100 kHz.

Oceanetics Measurement Ltd. pinger receiver. 27, 37 & 45 kHz settings. Omni-directional hydrophone.

<u>Sonotronics EMT03AR Tilt-Pingers</u>, 37kHz; ping rate switches from 1- to 2-Hz when tilt exceeds 15 degrees. Requires pinger receiver.

WATER QUALITY (Temperature, Salinity, Pressure, Dissolved Oxygen, Turbidity, Chlorophyll)

RBR Ltd. Concerto CTD. Light and compact.

RBR Ltd. Concerto CTD+Tu. (740 m max) With Seapoint turbidity sensor. Fast, 6 Hz.

RBR Ltd. Concerto CTD w/ Paros Pressure (700 m).

RBR Ltd. Concerto CTD+Rinko DO. Fast thermistor; 6 Hz sampling.

RBR Ltd. Concerto CTD. Fast 6Hz; Twist On/Off; Wi-Fi

RBR Ltd. XR-420 CTD. Light and compact.

Plastic cage for RBR CTD's (no effect on inductive C-cell)

RBR TR1050P Temperature Loggers.

RBR SOLO-T Temperature Loggers.

SeaBird 37SM(P) CTD. Pumped.

JFE Advantech Alec Compact CLW-USB logger, w/ Chlorophyll, turbidity & temperature. (250 m max) With wiper.

JFE Advantech Alec AROW2-USB Rinko DO logger, w/ temperature. With wiper.

SONAR (Scanning, Ice Profiling)

ASL Ice Profiling Sonar IPS-5. 420 kHz, measures ice draft at 1-2 Hz sampling for periods up to 9 months.

ASL Shallow Water Ice Profiler SWIPS. Internal battery. Typically 20 m range.

ASL Acoustic Zooplankton Fish Profiler AZFP. Four frequency: 125-200-455-769 kHz.

ASL Acoustic Zooplankton Fish Profiler AZFP with frame. Four frequency: 67.5-125-200-455 kHz.

<u>Imagenex 881A scanning sonar</u>; 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).

ASL IRIS Data Logger for Imagenex 881A Sonar (above). Stores files in raw Imagenex format. Operating software allows multiple/burst scans.

SUBSURFACE FLOTATION, MARKER BUOYS

OpenSeas SubsA2 (low-drag torpedo w/ two 12B3 Viny floats). Standard configuration is to hold a TELEDYNE RDI WH ADCP.

OpenSeas SubsB3 (low-drag torpedo w/ three 12B3 Viny floats).

MSI Ellipsoid Buoy EB-F-P5 for WH ADCP. Low drag. Holds WH ADCP.

Nautilus Vitronex 17" Glass Float, with hardhat & Eddy Grip; 57 lb net buoyancy, 6700 m.

Benthos 17" Glass Float w/hardhat, 48 lb buoyancy, 6700 m.

Viny Float, 12B3, 20 kg buoyancy, 200 m.

Flotation Technologies M40. For ADCP. Syntactic foam, 1500 m rated, 418 lb net buoyancy.

Flotation Technologies CF-12HD bolt-on cable float. Syntactic foam, 1500 m rated, 6 lb net buoyancy.

NAVIGATION, GPS, ECHOSOUNDER

<u>Garmin 525S GPS</u> with dual frequency echo sounder (50, 200 kHz). GPS is WAAS enabled for differential corrections. Serial output of lat, long and depth.

Furuno satellite compass SC-30. Great for the arctic or anywhere a regular compass is unreliable. NMEA output. With RD33 digital display.

SATELLITE BEACONS, VHF & FLASHERS

<u>Novatech AS900A ARGOS satellite beacon</u>. Transmits location via satellite when mooring on surface. Extra charge for transmissions.

XEOS Kilo Iridium beacon. (satellite usage costs extra)

XEOS XMi-11k Iridium beacon. 11,000 m rated. (satellite usage costs extra)

Metocean Data Systems RF700C6 RF Beacons. RF transmission and flashing light when on surface.

DF500N hand-held direction finding receiver.

WEATHER STATIONS

Hobo Weather Station. Air temperature, pressure, wind speed & direction. 2 m mast. Runs on batteries.

FTS weather station. Self-contained; 10 m mast, with wind speed & direction, temperature, humidity, solar panel/battery.

Airmar Ultrasonic Weather Stn 220WX

OTHER FIELD & SAMPLING EQUIPMENT

RTSys Noise Recorders. Underwater noise recorder; 1000m; with Pr&Temp, Geospectrum M36-V35-900 hydrophone; 512 GB microSD card; 4 TB hard disk drive

Niskin bottle. General Oceanics Model 1010, 2.5 liter.

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.

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

Kahl Scientific meter wheel. For 1/4" wire rope. 6" or 12" With counter.

Battery powered capstan. Portable battery powered capstan; 1000kg max pull; 11.6 m/min speed.

We Accept Payment by MasterCard or VISA



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TELEDYNE RDI Doppler Volume Sampler (DVS) 6000. \underline{BACK}



Nortek Aquadopp, **BACK**



Nortek 10 MHz 3D Vectrino, BACK



JDC Electronics Flowatch.

BACK



TELEDYNE RDI 75 kHz 'LongRanger' ADCP. BACK



TELEDYNE RDI 150 kHz WH Sentinel 'Quartermaster' ADCP. \underline{BACK}



TELEDYNE RDI V50 Sentinel ADCP. BACK



TELEDYNE RDI 2000 kHz StreamPro ADCP. BACK



TELEDYNE RDI RiverRay ADCP (600 kHz phased array). \underline{BACK}



TELEDYNE RDI Oceanscience Q-Boat. BACK



Mooring cage for ADCP or Ice Profiling Sonar (Dual cage). \underline{BACK}



Gimbaled Bottom Mount. BACK



MSI Gimballed Tripod.

<u>BACK</u>



 $\label{eq:constraints} \begin{tabular}{ll} Non-gimbaled Bottom Mount. \\ \hline {\bf BACK} \end{tabular}$



 $\label{eq:constraints} \begin{tabular}{ll} Non-gimbaled Bottom Mount. \\ \hline {\bf BACK} \end{tabular}$



SOFAR Spotter Buoy.

<u>BACK</u>



ASL 420 kHz Wave Sonar. BACK



RBR Ltd. Virtuoso Wave & Tide gauge. BACK



EdgeTech Model AMD200R acoustic deck unit and similar EdgeTech PACS LF acoustic deck unit.

BACK

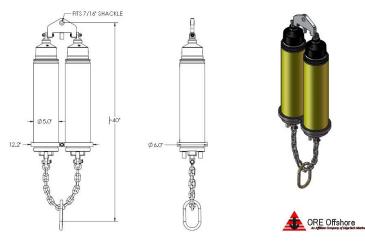


EdgeTech Model 8011M acoustic deck unit. \underline{BACK}



 $\label{eq:constitution} \begin{array}{l} \textbf{EdgeTech CART LF acoustic releases.} \\ \textbf{\underline{BACK}} \end{array}$





EdgeTech Tandem assembly. BACK



Pop-up rope canister & Viny float. BACK



 $\label{eq:Benthos} \textbf{Benthos/Datasonics transponder interrogator.} \\ \underline{\textbf{BACK}}$



Benthos acoustic pinger ALP364A/EL. BACK



Benthos pinger receiver DPL-275XS. \underline{BACK}



JW Fishers SFP1 acoustic pingers. BACK



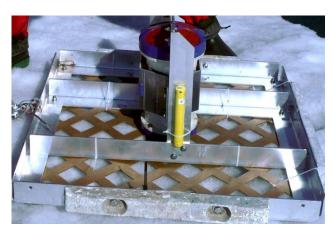
RJE Int'l PRS-275 pinger receiver. BACK



 $\begin{array}{c} \textbf{Sonotronics ManTrack pinger receiver.} \\ \underline{\textbf{BACK}} \end{array}$



Oceanetics Measurement Ltd. pinger receiver. \underline{BACK}



 $\begin{array}{l} \textbf{Sonotronics EMT03AR Tilt-Pingers.} \\ \underline{\textbf{BACK}} \end{array}$



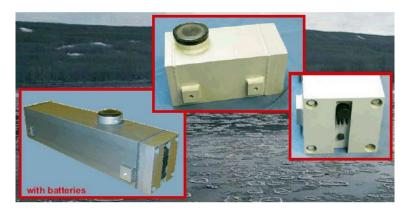
RBR Ltd. XR-420 CTD. BACK



JFE Advantech Alec Compact CLW-USB logger. \underline{BACK}



ASL Ice Profiling Sonar IPS-5. BACK



ASL Shallow Water Ice Profiler SWIPS. BACK



ASL Acoustic Zooplankton Fish Profiler AZFP with frame. \underline{BACK}



Imagenex 881A scanning sonar. BACK



ASL IRIS Data Logger for Imagenex 881A Sonar. \underline{BACK}



OpenSeas SubsA2.

<u>BACK</u>



MSI Ellipsoid Buoy EB-F-P5 for WH ADCP. $\underline{\mathsf{BACK}}$



Viny Float, 12B3.

BACK



Flotation Technologies M40. BACK



Flotation Technologies CF-12HD. BACK



Garmin 5258 GPS.
BACK



Furuno satellite compass SC-30. \underline{BACK}



Novatech AS900A ARGOS satellite beacon. \underline{BACK}



 $\begin{tabular}{ll} Metocean \ Data \ Systems \ RF700C6 \ RF \ Beacons. \\ \hline {\bf BACK} \end{tabular}$



DF500N hand-held direction finding receiver. BACK



Hobo Weather Station. BACK



FTS weather station.

BACK



RTSys Noise Recorders.

BACK



Niskin bottle.
BACK



Brooke Ocean Technology BOT-Wing. \underline{BACK}



ASD FieldSpec HandHeld2 spectrometer (325-1075 nm). \underline{BACK}



Battery powered capstan.

BACK