

SHORT FORM

This is a summary of the Metocean Data Systems range. Please request detailed specific data sheets or download directly from the Planet Ocean web site.



WOCE

World Ocean Circulation Experiment Buoy

- Lagrangian drifters for measuring near-surface (15 meters deep) water currents
- Major weather forecasting agencies around the world exclusively use METOCEAN WOCE buoys



Davis Drifter

- Lagrangian drifters for measuring coastal and estuarine water currents within one meter of water surface
- Developed by Dr. Russ Davis of SIO as a CODE (Coastal Dynamics Experiment) drifter in the 1980s
- The buoy's hull and drogue are submerged, with four floats providing the buoyancy necessary to keep the Argos antenna above water



M-CAD

METOCEAN Compact Arctic Drifter

Designed in conjunction with the Japan Marine Science and Technology Center to provide polar research scientists with cost-effective, in-site, near real-time environmental information. The M-CAD reports meteorological and oceanographic data via satellite and also stores this data internally as a backup. This system consists of four major elements: underwater sensors, meteorological sensors, a system controller and a data telemetry system -- complete with internal data logger. All of the underwater sensors communicate with the main system controller via inductive coupling telemetry on the underwater strain member. The system controller is microprocessor-based and controls each of the sensor data acquisition and processing modes.

EMBS:

Environmental Monitoring Buoy System.

- Designed for environmental data collection, meteorological and oceanographic measurements in estuaries and coastal regions
- Adapted from METOCEAN's highly successful Argos-reporting drifting buoy product line – over 4,000 have been deployed in the last 18 years
- Wide variety of sensors to meet unique environmental and meteorology data collection and monitoring requirements
- Real time data collection and data logging capabilities may be easily integrated into the system



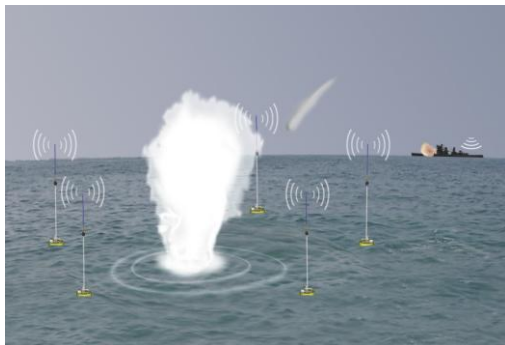
TOGA **Tropical Ocean Global Atmosphere Drifting Buoy**

- TOGA-style buoys have been in use for more than 20 years and were the only drifters used in the international TOGA program for meteorological measurements in the equatorial Pacific
- NDBC (National Data Buoy Center) used the TOGA buoy for ocean measurements for 15 years
- It remains the most reliable and cost-effective drifting buoy system available today for open ocean applications
- The METOCEAN TOGA buoys are used exclusively by major world-wide weather forecasting agencies
- Certified for air deployment by US Navy aircraft



CALIB **Compact Air-Launch Ice Beacon**

- Argos reporting mini buoy, low-cost, easily transportable, and air-deployable
- Alkaline batteries are used for short-term deployment (3 months or less)
- Lithium batteries are used in buoys which will be deployed for many months and in buoys with barometers
- The buoy's outer housing, a phenolic tube, is RF-transparent and has excellent, low-temperature structural characteristics



MASS: **Mobile Acoustic Scoring System.**

MASS is a free floating buoy system that has been developed to allow vessels to undertake self-conducted gunfire training exercises around the world.

The buoy system consists of a set of operation buoys, which report acoustic event data, buoy position (GPS location) and precise time (to 150 microseconds). The precise time of the acoustic event is sent via a spread spectrum radio, to a base station receiver typically located on the ship from which the shells were fired.

The base station receives and processes the data, then calculates and displays where the shell landed relative to a chosen target point. This data provides real time feedback accuracy of the gunfire.



PROVOR **Autonomous Oceanographic Lagrangian Profiler**

- IFREMER-designed float is extremely reliable and very cost-effective
- Fully ARGO compatible: CTD profiles to 2,000 meters and more than 150 profiles
- "Fan-Tail ready" deployment by ship or aircraft
- Argos-reporting with transmission periods as short as 10 seconds and with multiple Argos ID capability
- Integral element of French in-situ operational oceanography program – CORIOLIS

This is a small selection of the available Metocean technology. Please contact Planet Ocean for your specific project needs.

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