

Fastwave



VOYAGER OIL SPILL TRACKER (VOST) BUOY

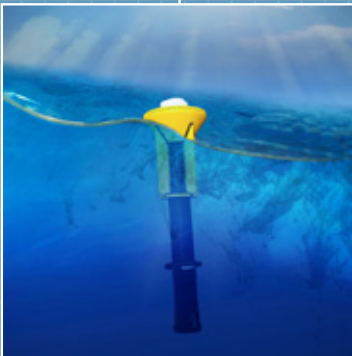
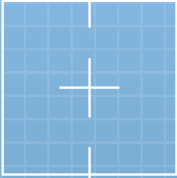
A DRIFTER BUOY WITH INTEGRATED CHELSEA UVILUX
FLUOROMETER FOR IN-SITU MEASUREMENT OF OIL CONTENT

INTEGRATED UV FLUOROMETER FOR REAL-TIME DETECTION OF

- Polycyclic Aromatic Hydrocarbon (PAH)
- Crude hydrocarbons
- Coloured Dissolved Organic Matter (CDOM)
- Tryptophan - found in sewage and slurry
- Optical brighteners
- Bacterial contamination in waste, recycled & natural water supplies

REAL-TIME DATA FOR

- Oil spill tracking
- Oil spill hydrocarbon content validation
- Outfall and dredge plume tracking
- Maritime Search and Rescue operations
- Contaminant and debris tracking
- Coastal engineering studies
- Water quality studies



FEATURES

- Global, near real-time, 2-way communication system transmits GPS position, sea surface temperature, battery voltage and optional sensor data
- Design minimises wind influence and ensures close coupling with surface layer
- Long endurance - e.g. up to 150 days @ 3 hourly reporting
- Re-useable
- User replaceable, long shelf-life, flyable D-Cell alkaline battery pack
- Robust, compact design – drop launch from up to 15m
- Simple to deploy with a non-mechanical, fully sealed on/off switch
- LED and vibration alert for on/off
- Compact and easy to deploy
- Remotely adjustable reporting interval (2 Min – 24 hrs)
- Rapid response mode for oil spill tracking and search and rescue

OPTIONAL FEATURES

- Additional sensor options, e.g. turbidity, compact weather station
- AIS version for local vessel alerting and tracking
- Marker flag and strobe light to assist in recovery
- Drogue for sub-surface tracking
- Parachute for airborne deployment
- Transport case

VOYAGER OIL SPILL TRACKER DATA MANAGEMENT

The Voyager delivers data to Fastwave's secure servers, where it is de-coded and accessible through an on-line data management portal, or data can be delivered directly to client GIS systems for further processing. The Fastwave management system enables clients to send commands to the Voyager to change reporting intervals or geo-fences to be set up.

VOYAGER OIL SPILL TRACKER SPECIFICATIONS

Height Overall	930 mm
Diameter	250 mm
Approx. Weight	8.3 kg
Material	High Density Polyethylene (HDPE)
Power Supply	Alkaline D Cell Battery Pack (12 X D-Cell, 9V)
Communications	Iridium short burst data – Iridium Satellite & GPRS
Temperature Sensor Operating Environment	Water Temp: -2 to +65 degrees celsius
Operating Life	Around 1200 transmissions on fully charged battery pack

INTEGRATED CHELSEA UVILUX FLUOROMETER

	PAH	CDOM	Tryptophan	Optical Brighteners
Excitation	255nm	255nm	280nm	350nm
Emission	360nm	450nm	360nm	450nm
Sensitivity	0.005µg/l 5ppt (Carbazole)	0.002µg/l 2ppt (Perylene)	0.02µg/l 20ppt (Tryptophan)	0.1 mg/l 100ppb (Commercial Detergent – sensitivity equivalent to 1:20,000 dilution of typical load)
Calibrated Range	0.005 - 200µg/l	0.002 - 15µg/l	0.02 - 800µg/l	0.01 - 2500mg/l

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