



data buoy platforms



moorings



navigation buoys



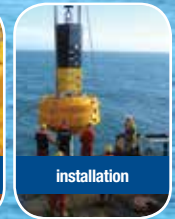
hydrosphere



navigation lights



mooring buoys



installation

the UK's leading supplier of aids to navigation

Mobilis EOL

3.6m diameter data buoy platform



MOBILIS

The Mobilis Environment Observable Littoral (EOL) data buoy is an automatic profiler buoy originally designed to measure the impact of human activity in coastal waters. The buoy is fitted with a number of sensors that measure water quality including: conductivity, temperature, depth, pH, dissolved oxygen, chlorophyll A, and turbidity. The buoy is also fitted with a meteorological station.

The EOL buoy comprises a 3.6m diameter hull constructed from multiple-section polyethylene floats that are bolted around a central steel structure, with through-hull access for underwater instrumentation and cabling. The instrument package is automatically lowered from the buoy to the sea bed and back at preset intervals with data gathered during the lowering and raising operations.

All data is transmitted to shore as well as being logged in the onboard data acquisition/telemetry unit. When the instrument package is in its raised position, it is stored within a unique electro-chlorination chamber, which automatically cleans the sensors of any biofouling. The large tower allows technicians to undertake checks and routine maintenance of the sensors and data acquisition system within the safe confines of the tower. It also provides suitable mounting for a large solar array that recharges a battery bank, which in turn provides power for the instrument package, the data acquisition and telemetry system and, most importantly, the winch. A multi-point mooring system is deployed to avoid entanglement of the instrumentation being lowered beneath the buoy.

features:

- UV stabilised MDPE components – retains colour within IALA guidelines for more than 15 years
- Highly stable in strong currents and deep water
- Modular system - reduces spares holding
- Robust, compact design
- Through-hull access
- Automatic winch to lift and lower instrumentation
- Modular solar power systems
- Electro-chlorination room for automatic cleaning of sensors
- Multi-point mooring system



data buoy platforms

multiple float sections



modular



aquaculture | marinas & sailing clubs | ports & harbours | offshore renewable energy | oil & gas

t: +44 (0)1420 520374 www.hydrosphere.co.uk e: sales@hydrosphere.co.uk

Mobilis EOL

specifications and applications

construction

Central Hull Structure	Glass flake painted steel
Floats	MDPE - min 20mm thick
Tower & Equipment Ring	Marine grade aluminium

physical

Hull Diameter mm	3600
Total Height mm	6800
Freeboard (Fully Laden) mm	1500
Draft (Fully Laden) mm	2050
Focal Height mm	3800
Hull Buoyancy Kg	14000
Reserve Buoyancy (Total Assembly) Kg	10500

power system

Solar Panels W	400
Batteries Ah @ 12v dc	1320

weights

Complete Buoy Kg	3500
------------------	------

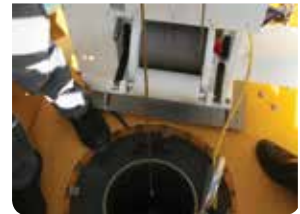
application

Offshore	✓
Ocean	✓

chlorination chamber



automatic winch



through-hull access



large solar power system



underwater instruments



daymark tower



Mobilis data buoy platforms

Mobilis data buoy platforms can be tailored to meet user requirements regarding shape, navigation lights, radar reflectors, solar power supplies, monitoring systems, and moorings. Full installation and maintenance services are available. Please **contact us** for more information.



hydrosphere

about Hydrosphere

Hydrosphere is the UK's leading supplier of aids to navigation and has been providing cost-effective solutions to the marine industry for more than 20 years. We offer a wide range of navigation and mooring buoys, LED navigation lights, sector lights, rotating beacons, leading lights, jetty masts, beach and zone marking products and associated moorings. Rental, installation and maintenance services are also available for all our products and systems.

For more information please contact us.

data buoy platforms | moorings | navigation buoys | navigation lights | mooring buoys | installation

t: +44 (0)1420 520374

www.hydrosphere.co.uk

e: sales@hydrosphere.co.uk

Compliant with all IALA recommendations.



Royal Institute of Navigation

