



the UK's leading supplier of aids to navigation

Mobilis DB 8000 UKMO-OC

3m diameter data buoy platform



MOBILIS

The DB 8000 UKMO-OC is a meteorological/oceanographic data buoy capable of carrying a large number of sensors/equipment packages along with a large solar panel array and battery bank.

Based on the Mobilis DB 8000 data buoy platform, it comprises a 3m 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 large marine grade aluminium towers of the DB 8000 allow its large equipment payloads to be placed in a protected location. The UKMO-OC buoy has been designed with a larger diameter tower to allow more equipment to be installed and enable technicians to access underwater instrumentation from inside the tower. In addition, the meteorological sensors and antennae are mounted within a strong protection ring whilst still allowing exposure to the elements that they are installed to measure.

The UKMO-OC buoy, as shown opposite, contains a meteorological sensor suite measuring wind speed and direction, air temperature, relative humidity, and barometric pressure. It also has an oceanographic sensor suite measuring salinity, depth, dissolved oxygen, chlorophyll 'A', turbidity, dissolved organic matter, and nitrates. A spectral wave sensor outputs wave height, wave period and direction. Data is transmitted ashore using an Iridium satellite communication system.



data buoy platforms

features:

- UV stabilised MDPE components – retains colour within IALA guidelines for more than 15 years
- Highly suitable for offshore wind farms
- Modular system - reduces spares holding
- Robust, compact design
- Can withstand harsh marine environment
- Through-hull access
- Easy to handle and transport
- Modular solar power systems
- Highly stable in operation

modular



highly visible



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

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Mobilis DB 8000 UKMO-OC

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 | 3000 |
| Total Height mm | 6150 |
| Freeboard (Fully Laden) mm | 1200 |
| Draft (Fully Laden) mm | 1870 |
| Focal Height mm | 3850 |
| Hull Buoyancy Kg | 8000 |
| Reserve Buoyancy (Total Assembly) Kg | 5200 |

power system

| | |
|-----------------------|-----|
| Solar Panels W | 760 |
| Batteries Ah @ 12v dc | 600 |

weights

| | |
|------------------|------|
| Complete Buoy Kg | 2820 |
|------------------|------|

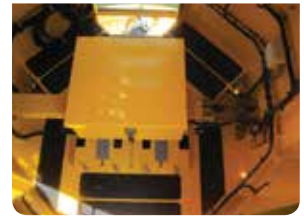
application

| | |
|----------|---|
| Offshore | ✓ |
| Ocean | ✓ |

instrument enclosures



safety features



through-hull access



solar power system



power supplies



instrument cage



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

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Compliant with all IALA recommendations.



Royal Institute of Navigation

