



# DB1750 Metocean Buoy

FIXED WATER QUALITY, PROFILING WATER QUALITY, CURRENT, WAVE, WEATHER & NAVAID

## Multi Purpose Metocean Buoy

The DB1750 has a design life of 10 years and is manufactured from UV stabilised LLDPE with a environmentally friendly polyurethane filling. Being IALA compliant, the DB1750 has been deployed globally both in a NavAid capacity and for environmental monitoring. The DB1750 provides a rugged, long life, lightweight buoy whilst reducing the long term maintenance expense typically associated with floating aids to navigation.

### A few benefits of the DB1750 include:



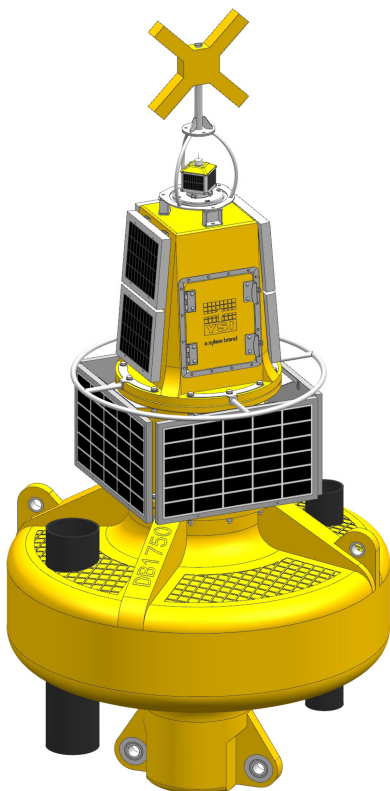
**Long-term strength and security** - The float section is internally cross-braced with stainless steel rods that are connected to stainless steel bushings in mooring and lifting eyes.



**UV-stabilised low density polyethylene** - rotationally moulded to form a seamless hull, 12mm thick, providing more resistance to collision damage and puncture.



**Stability** - Achieved by filling the float section with a calculated amount of reinforced concrete as ballast.



# DB1750 METOCEAN BUOY

## Design and Monitoring Features

### Flexible Environmental Monitoring -

- Up to 6 moon pools - black or yellow (150mm or 220mm dia) for easy deployment of environmental instruments.
- Access to Top section with through a sideways opening, splashproof, lockable hatch. Top Section suitable for data logging and telemetry systems. Includes separate battery compartment.
- Up to 360W solar power capability (120W around top section and 240W around battery compartment).
- Ability to add profiling winch to existing moon pool.
- Real time data capability means the DB1750 is perfect aid for vessel navigation through channels, ports and harbours.

### Robust Design

- A float section, battery section and a top section form an abrasion resistant, shock absorbing buoy able to withstand knocks and/or collisions.
- The float section has a moulded slip resistant surface and SS316 grip bar to provide additional safety during deployment and station maintenance.

## Technical Details

Construction	Rotationally moulded in medium density UV-stabilised low density polyethylene, 12mm thick.
Filling	Polyurethane
Diameter	1750mm
Air Weight	550kg
Nominal Draft	800mm
Nominal Freeboard	425mm
Submergence	5.5kN
Focal Plane Height	2308mm
Superstructure Height	1365mm
Radar Reflector	2m <sup>2</sup>
Radar Range, Nominal	3 to 4nm
Visual Area	2m <sup>2</sup>
Surface Color	IALA colours
Maximum Mooring Load	950kg
Maximum Current	6 knots
Moon Pools	1 to 6 (specify at order). Yellow or Black 150mm or 220mm.

Specifications subject to change.

## Recommended Moorings:

Current less than 2 knots*			Current 2-4 knots*			Current 4-6 knots*		
Water Depth (ft)	Chain Length (Shot)	Chain Size	Water Depth (ft)	Chain Length (Shot)	Chain Size	Water Depth (ft)	Chain Length (Shot)	Chain Size
35	45 ft (1/2)	1 1/8 in	35	90 ft (1)	1 1/8 in	35	90 ft (1)	1 1/8 in
35-50	90 ft (1)	1 in	35-50	90 ft (1)	1 in	35-50	135 ft (1 1/2)	1 in
50-80	135 ft (1 1/2)	1 in	50-80	135 ft (1 1/2)	1 in	50-80	180 ft (2)	1 in
80-120	180 ft (2)	3/4 in	80-120	225 ft (2 1/2)	3/4 in	80-120	270 ft (3)	3/4 in
120-160	225 ft (2 1/2)	5/8 in	120-160	450 ft (5)	5/8 in	120-160		
160-200	315 ft (3 1/2)	1/2 in	160-200	450 ft (5)	1/2 in	160-200		

\* Recommended Mooring are a guide only. Always have moorings design by a professional.



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