

The TIDAL™ 0.90M-FW Fast Water buoy is designed for use in high current waterways. The unique shape of the hull and replaceable steel keel allows this buoy to track well & remain stable in varying current speeds.

KEY FEATURES

- Rugged Modular Polyethylene Construction
- Excellent Visual and Radar Signature
- 316 Grade Stainless Steel Mooring & Handling Eye
- Standard and Optional Items
- 100% Recyclable after a long service life

MANUFACTURED TO LAST

Virgin colour compounded UV-20 polyethylene designed and tested to provide long-lasting colour fade and impact resistance. The mooring, handling, and all fasteners and inserts are 316 grade stainless steel to minimize maintenance.

EXCELLENT RADAR SIGNATURE

The tower section contains a 24 m² RCS (avg) large internal radar reflector that Coast Guard clients have confirmed has a 1.15+ NM range. The proprietary system used to secure the reflector also allows for its re-use.

VERSATILE

The low-draft hull design combined with a maximum mooring mass capacity of 50 kg (air) allow the buoy to be used in shallow water, high current applications and even deep water with cable mooring lines.

COLOUR CONFIGURATION

Available to meet the requirements of all IALA Colour / Configuration Recommendations with top marks and self-contained lanterns.



RECYCLING AND REUSE

All TIDAL™ buoys are manufactured solely with materials that are readily recyclable; items like the radar reflector are designed and secured so they can be re-used. Call to discuss how you or TIDAL™ can recycle your buoys.



GENERAL SPECIFICATIONS

Diameter	35.4 in	0.90 m
Height	63.7 in	1.62 m
Mass	203 lbs	92 kg
Hull Floatation Volume	13.8 ft ³	0.39 m ³
Submergence	61.8 lbs/in	11.0 kg/cm
Max. Mooring & Ballast Mass (Air Weight)	110 lbs	50 kg
Min. Mooring & Ballast Mass (Air Weight)	55 lbs	25 kg
Draught (at Min. Mooring Mass)	15.1 in	0.38 m
Reserve Buoyancy (at Maximum Mooring Mass)	306 lbs	138.9 kg

PERFORMANCE SPECIFICATIONS

Focal Plane Height (at Min. Mooring Mass)	51.7 in	1.31 m
Visible Height (at Min. Mooring Mass)	52.7 in	1.34 m
Visual Area / Surface (at Max Visible Height)	9.4 ft ²	0.87 m ²
Distance of Recognition (at Max. Visible Height)	0.85 NM	1.58 Km
Radar Range	1.15 NM	2.13 Km
Internal Radar Reflector (RCS: Peak / Average over 360°)	24 m ²	

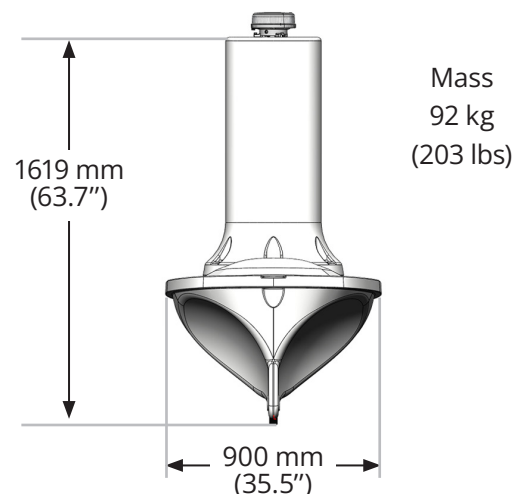
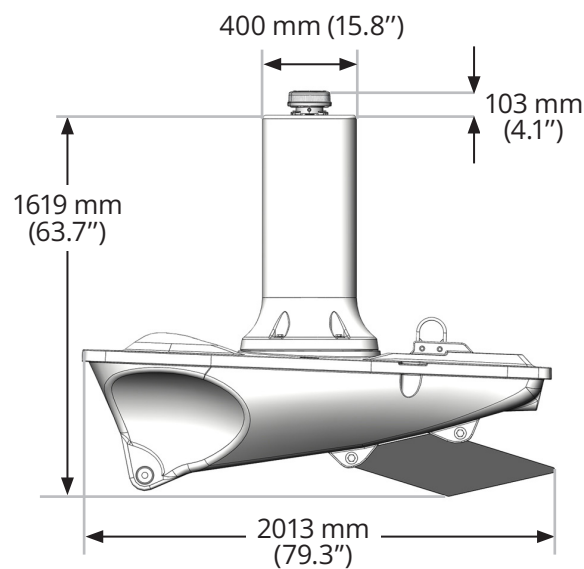
MATERIAL SPECIFICATIONS

Topmark	Conical top version available	
Tower Structure	Virgin MDPE with UV20 protection package	
Buoy Hull	Virgin MDPE with UV20 protection package	
Wall Thickness	3/8 in	8.5 mm
Foam Filling	Closed cell EPS fused in situ block	
Handling and Mooring Eye	316 stainless steel	
Safe Working Load (SWL)	330 lbs	150 kg
Colours	Compliance with IALA Recommendation R0108	
IALA Compliance Testing	Independent laboratory test results available	
Colourfastness Test Procedure	Xenon Arc Accelerated Weathering per ASTM D-2565	
Colourfastness Testing	Independent test results available per ASTM D-2244	
Product Life Expectancy	15 - 20 years	
Warranty	5 years	

Mooring Line Design

- Mooring design to optimize the performance of each buoy.
- Advanced 3D dynamic analysis of the mooring line and buoy.
- Supply of custom mooring lines with proven components.
- Catenary, inverse-catenary, chain, and synthetics.

Our advanced modelling software can perform dynamic analysis of the interaction between the mooring line and the buoy in normal "operating" conditions to assess and optimize buoy performance. Importantly, this dynamic analysis is also used to assess performance across a range of "survival" conditions.



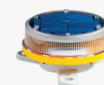
M550



M650



M660



We carry a wide range of self-contained and externally powered lights for navigation buoys from world leaders such as Sabik, Sealite, Ekta, and Vega.

Depending on the size and use of the buoy, we offer options such as AIS Type I or Type II, remote monitoring & control, and on-board solar power systems.

PERFORMANCE SUMMARY

