

The TIDAL™ 0.75m Fast Water buoy is designed for use in high current waterways. There are three mooring attachment positions and a ballast weight attachment eye to allow customization of the mooring based on depth and current speed.

KEY FEATURES

- Rugged Polyethylene Construction
- 316 Grade Stainless Steel Mooring Eye to Lifting Eye
- Unique high current hull and adjustable mooring
- Threaded inserts for attaching solar powered lantern
- 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. Completely foam filled to prevent water ingress if the buoy is damaged.

INTERNAL RADAR REFLECTOR

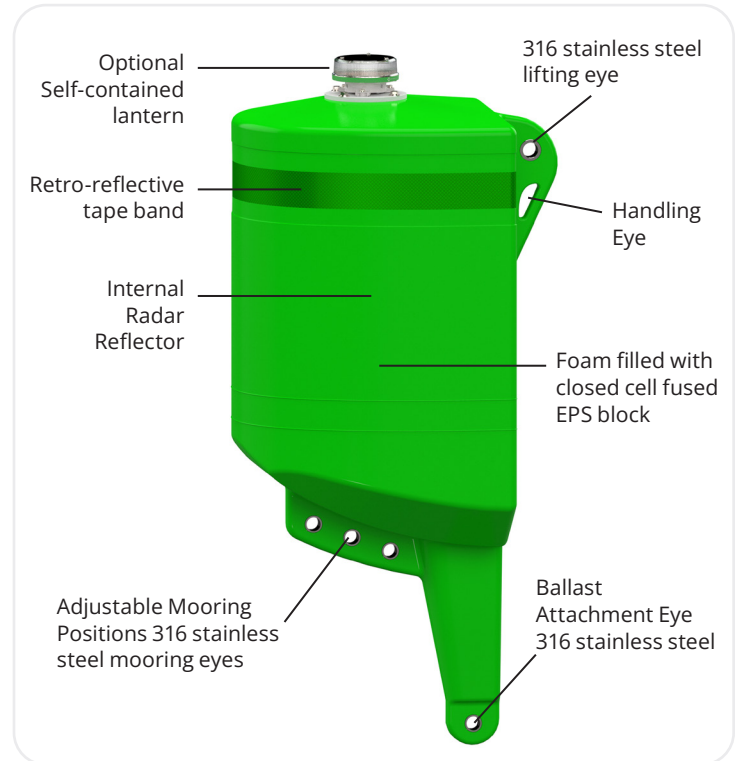
The upper section of the buoy contains a 24m² RCS (avg) large internal radar reflector that Coast Guard clients have confirmed has a 1.15+ NM range.

VERSATILE

Multiple mooring attachment points and a ballast attachment point allow customization of the mooring based on water depth and current speed to optimize performance.

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	29.5 in	0.75 m
Height	71.6 in	1.82 m
Mass	110 lbs	50 kg
Hull Floatation Volume	19.8 ft ³	0.561 m ³
Submergence (Freshwater)	28.4 lbs/in	5.07 kg/cm
Max. Mooring + Ballast Mass (Air Weight)	331 lbs	150 kg
Min. Mooring + Ballast Mass (Air Weight)	221 lbs	100 kg
Draught (at Min. Mooring Mass)	36.5 in	0.93 m
Reserve Buoyancy (at Maximum Mooring Mass)	517 lbs	235 kg

PERFORMANCE SPECIFICATIONS

Focal Plane Height (at Min. Mooring Mass)	38.7 in	0.98 m
Visible Height (at Min. Mooring Mass)	38.7 in	0.98 m
Visual Area / Surface (at Max Visible Height)	7.53 ft ²	0.70 m ²
Max. Distance of Recognition (at Max. Visible Height)	0.65 NM	1.20 Km
Radar Range	1.15 NM	2.13 Km
Internal Radar Reflector (RCS: Average over 360°)	24 m ²	

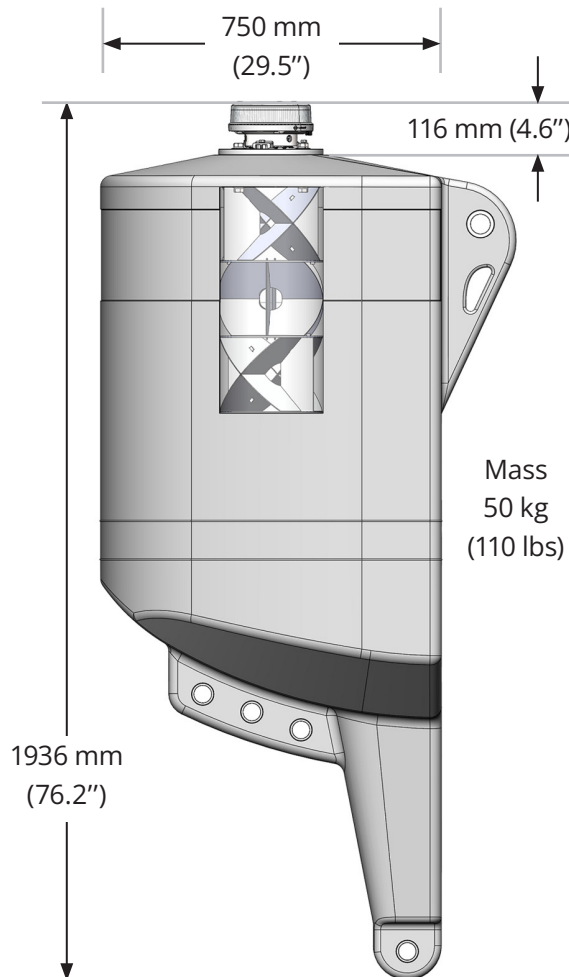
MATERIAL SPECIFICATIONS

Topmark	Conical top version available	
Buoy Hull	Virgin MDPE with UV20 protection package	
Wall Thickness	5/16 in	9 mm
Foam Filling	Closed cell EPS fused in situ block	
Safe Working Load	1,323 lbs	600 kg
Mooring & Lifting Assembly	316 stainless steel	
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.



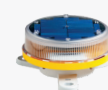
M550



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

