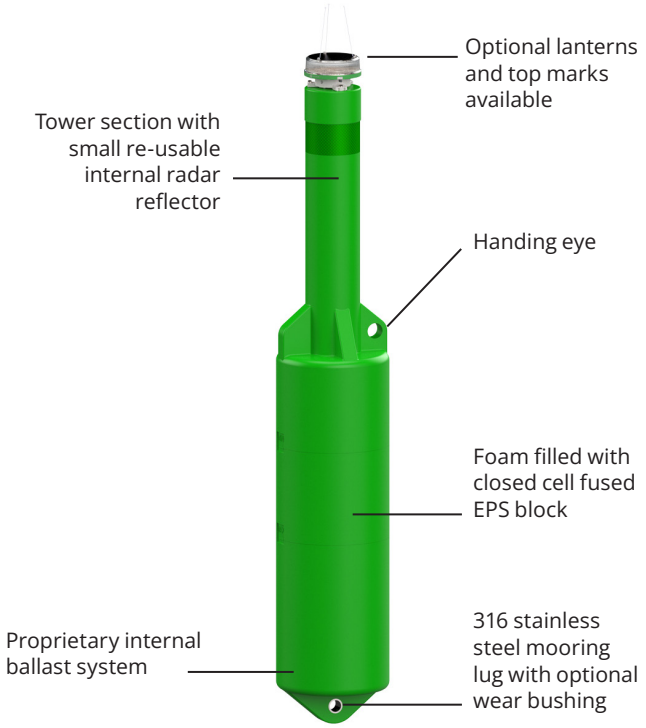
TDL-0.30M-S
Spar Buoy

The TIDAL™ 0.30m diameter Spar buoy features a larger float section and smaller daymark section. This provides more buoyancy for deeper water chain moorings. It also lowers the center of gravity adding stability for performance in current. This buoy is used as a channel marker, regulatory buoy and cautionary buoy.

KEY FEATURES

- Rugged Polyethylene Construction
- 316 Grade Stainless Steel Mooring Eye
- Handling Eye for movement in storage
- 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. It is also completely foam filled to prevent water ingress is damaged.

INTERNAL RADAR REFLECTOR

The top of the buoy contains a 2m² RCS (avg) internal radar reflector that Coast Guard clients have confirmed has a 0.5 NM range. The method of installing the reflector allows for its re-use.

INTERNAL BALLAST

Internal concrete ballast aids in upright stability and reduces the minimum required mooring mass to 20 kg (air weight). The large float section allows use in deeper water with up to 120 kg (air) of mooring mass and the possibility of a hybrid (chain and rope) mooring.

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.

NORTH AMERICA: 1-877-446-3337
INTERNATIONAL: 1-506-633-7850

IALA

info@tidalmarine.com
www.tidalmarine.com

TDL-0.30M-S
Spar Buoy

GENERAL SPECIFICATIONS

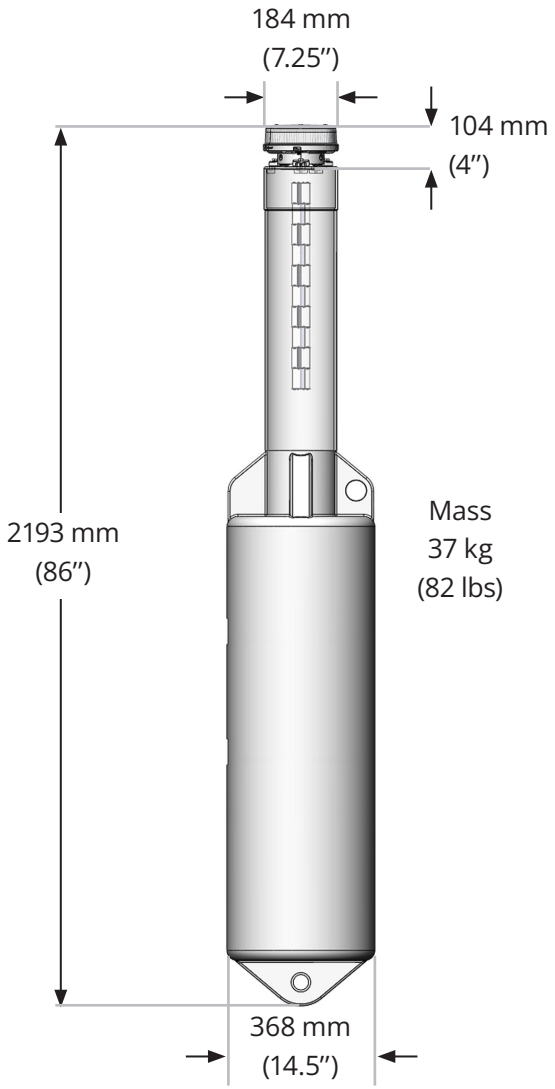
Diameter	14 ½ in.	0.37 m
Overall Height	86 in.	2.20 m
Mass	82 lbs.	37 kg
Hull Floatation Volume	5.0 cu ft.	0.142 m^3
Submergence	6.0 lbs / in.	1.06 kg/cm

PERFORMANCE SPECIFICATIONS

Focal Plane Height (at Min. Mooring Mass)	61 in.	1.55 m
Visible Height (at Min. Mooring Mass)	62 in.	1.58 m
Draught (at Min. Mooring Mass)	24 in.	0.61 m
Reserve Buoyancy (at Maximum Mooring Mass)	70 lbs.	32 kg
Min. Mooring Mass (Air Weight)	44 lbs.	20 kg
Max. Mooring Mass (Air Weight)	121 lbs.	55 kg
Visual Area / Surface (at Max Visible Height)	4.30 ft^2	0.40 m^2
Max. Distance of Recognition (at Max. Visible Height)	0.50 NM	0.93 Km
Internal Radar Reflector (RCS: Peak / Average over 360°)	2 m^2	
Radar Range	0.50 NM	0.93 Km

MATERIAL SPECIFICATIONS

Topmark	Conical topmark available	
Buoy Hull	Virgin MDPE with UV20 protection package	
Wall Thickness	5/16 in.	8 mm
Foam Filling	Closed cell EPS fused in situ block	
Mooring Eye & Lantern Inserts	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 avaliable per ASTM D-2244	
Product Life Expectancy	> 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.

NORTH AMERICA: 1-877-446-3337
INTERNATIONAL: 1-506-633-7850

IALA

info@tidalmarine.com
www.tidalmarine.com

PERFORMANCE SUMMARY