Tridel Deep Water Buoy

The Tridel TDB3000 is a 3.0-meter diameter deep water buoy, purpose-built from UV-stabilized, marine-grade polyethylene (PE) with a closed-cell polyurethane foam core. Designed for long-duration deployment in deep-sea and offshore environments, it offers exceptional buoyancy, structural integrity, and operational stability under extreme marine conditions.

Key Features:

- Diameter: 3.0 meters, optimized for high visibility and buoyancy
- Construction: Rotomolded PE outer shell with internal closed-cell PU foam, ensuring unsinkability and excellent impact resistance
- Corrosion-Free: 100% PE structure eliminates rusting, marine fouling, and degradation—no painting or recoating required
- High Freeboard: Maintains visibility in rough seas and supports top-mounted equipment
- Solar-Ready: Integrated mounts for solar panels and housing for battery banks to support autonomous operation
- Mooring System: Equipped with reinforced internal steel structure, mooring eyes, and lifting points, rated for deep water mooring (>1000m)
- Payload Mounting: Central platform accommodates sensors, telemetry units, compact winches, or acoustic equipment

Typical Payload Options:

- Marine lanterns (IALA-compliant)
- AIS transceivers
- Radar reflectors and day marks
- Environmental sensors (CTD, ADCP, weather)
- Satellite/GSM telemetry modules
- Meteorological sensors

Technical Specifications:

Parameter	**Specification**
Diameter	3.0 meters
Height (above water)	~0.9–2.5 meters (adjustable)
Material	UV-stabilized polyethylene with foam core
Net Buoyancy	Up to 5000 kg
Payload Capacity	1500–2000 kg (depending on configuration)

Parameter	Specification
Mooring Depth	Suitable for depths over 1000 meters
Power	Solar panels with battery enclosure
Maintenance	Very low; corrosion- and UV-resistant

Applications:

- Offshore oil & gas field marking
- Oceanographic and environmental monitoring
- Scientific instrument deployment in deep water
- Long-range navigation aid in open sea

The TDB3000 combines durability, simplicity, and adaptability, making it the ideal choice for clients requiring low-maintenance, high-performance buoys in deep water applications.


محطة رصد جوي
Weather Station
Keep Away
ممنوع الاقتراب


MET
BUOY-1


NIOT
NIOT, Chennai
Govt. of India, MoES, In
500
600
700
800
900
1000