

Buoy



TriOS Buoy-175 is a modern state-of-the-art instrumentation platform for environmental monitoring of water quality in small lakes, reservoirs or rivers. Flexibility, robustness, easy servicing access and protection for vandalism have been the main driving forces during the development of Buoy-175.

A large technical compartment contains batteries, controller, cables, etc. It is connected inside the Buoy -175 to the easy accessible Sensor Sections. The Sensor Sections are 4 locked build –in Moon Pools in the buoy that protect the sensors and measuring instruments.

The system is supplied with a range of sensors that can specified by the customer. All buoys are fitted with solar panels and batteries. An airblast cleaning system used on many TriOS sensors, Navigation/warning lights and other markings together with telemetry options are available, selected to suit both the location and application requirements.

Each of the 4 sensor frames can hold up to four sensors and is completely adaptable to any applications needs.

Possible options:

- Data Controller
- Airblast system
- Topmarks (e.g. St. Andrews Cross)
- Marine lantern
- Weather station/Meteorological sensor package
- Telemetry
- Expandable battery pack from 2 to 8 cells

Features & Benefits

- Low operational costs
- Easy to deploy and service
- Expandable to allow new sensors
- Supports a variety of options



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Technical Specifications

Hull structure	Welded UV stabilized polyethylene. Internally cross-braced with steel rods and connected to the stainless steel bushings in the mooring and lifting eyes. The hull is also filled with PUR foam to prevent water ingress in the event of hull damage.	
Tower	UV stabilized polyethylene	
Mooring	Single bridle	
Deployment	2 lifting eyes	
Finish	Colour pigment blended into polyethylene. No painting required	
Hull diameter	1620 mm	~ 63.8"
Total height *	2040 mm	~ 80.3"
Freeboard*	400 mm	~ 15.7"
Draft*	500 mm	~ 19.7"
Tower height	1040 mm	~ 41"
Focal height	1500 mm	~ 59.1"
Hull buoyancy	1400 kg	~ 55.1"
Reserve buoyancy *	780 kg	~ 30.7"
Full weight*	620 kg	~ 24.4"
Solar panels (Wp)	4 x 60 with MPPT charge controller	
Batteries 12V (Ah)	120 – 480 (2 – 8 cells)	
Battery type	AGM lead-acid	

* without sensors and sensor frames, full battery pack and no other options

