



The R500 is a composite construction with high production rates offering:

- Lightweight and high resistance;
- Large battery & payload section;
- Excellent buoyancy & stability;
- Easy to deployment & service;
- Excellent corrosion resistance

No painting, ever.

Cost effective & environmentally friendly.

Customization to better suit your needs.

Highlighted features:

- Light weight
- Easy handling
- Multi-parametric monitoring
- Real time monitoring
- High Durability
- Customizable
- User Friendly software
- Low maintenance
- I.A.L.A. compliant
- Impact resistant



The Water Guardian R500 is a small water quality and dynamics monitoring device, with a float diameter of 0,50 meters and a full year of work without maintenance this is a simple device for all types of jobs.

The WG R500 is fully built in composite, withstanding impacts, solar exposure, salt water and corrosion without a problem. Each section is laminated using UV-stabilized, isophthalic polyester resin reinforced with Kevlar* and glass fibers in order to obtain maximum durability, crash resistance and water impermeability. With thicknesses ranging from 3 up to 7mm this structure is rigid durable and reliable.

The small WG R500 packs a punch and can be upgraded with up to 32 sensors, and 4 or 5 solar panels for larger energy independence. Readings can be taken either dependent or independently and the probe will function correctly in fresh, salt or brackish water.

Simplified modular structure and electronics allows for easy upgradability and maintenance. Devices can be installed to meet specific client needs from low cost energy efficient sensors to high precision instruments.

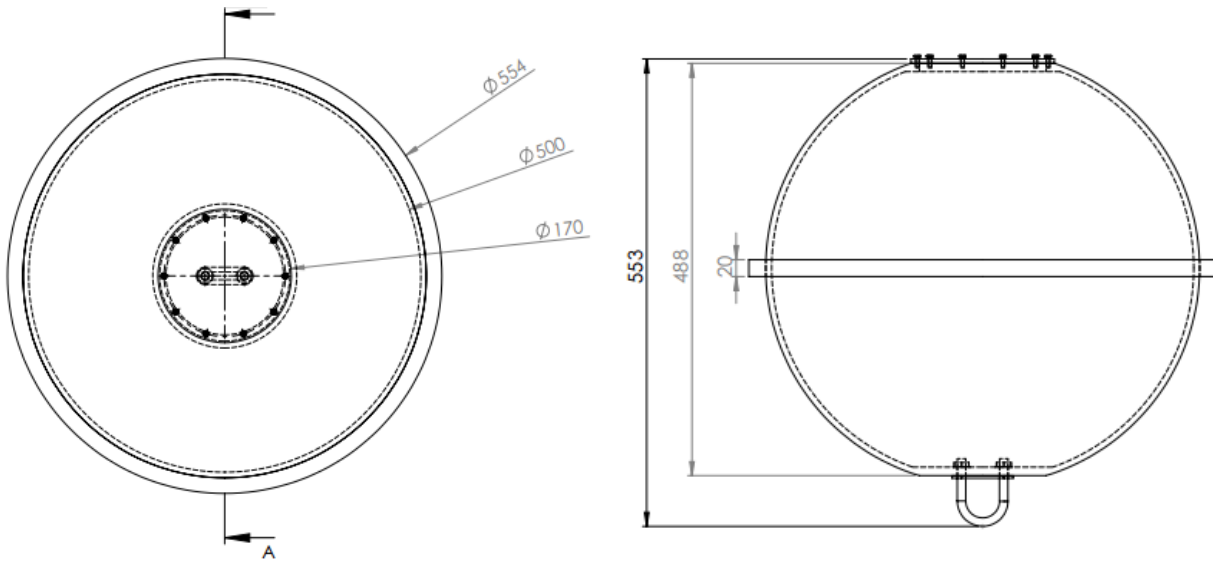
The WG R500 can generate alerts and send them to mobile devices via Wi-Fi or Bluetooth. Monitorization of several devices are achieved with radio frequency transmitter to connect large numbers of devices to 1 central server. This allows for a real time monitoring of dissolved oxygen, salinity, water level, temperature, pressure, position or live video.

The fully composite structure assures a rust free, low maintenance lifespan. No part of the structure requires painting at any stage of the product's life span. The WG can be supplied in all I.A.L.A. colors.

*optional



Wave Guardian R500SM



Wave Guardian R500SM	
General Characteristics	
Available Colors	Red, Green, Yellow as per I.A.L.A. recommendations
Focal Plane Height (mm in)	300,0 11,8
Total Float Volume (L gal)	26,2 6,9
Nominal Freeboard (mm in)	245 9,6
Freeboard, Minimum (mm in)	20 0,79
Draft, Maximum (mm in)	30 1,2
Nominal Draft (mm in)	120 4,72
Reserve Buoyancy (Kg lb)	52,4 115,5
Visual Area (m ² ft ²)	0,1 1,1
Water Area (m ² ft ²)	0,4 4,3
Ballast (Kg lb)	13,1 28,9
Maximum Mooring Load (Kg lb)	15,7 34,6
Safe Working Load, 1point (Kg lb)	200 441
Safe Working Load, 2points (Kg lb)	NA
Submergence (Kg.cm ⁻³ lb.in ⁻³)	0,21 0,46
Physical Characteristics	
Material	Isophthalic NPG Polyester resin reinforced with Kevlar and glass fiber; 316-grade SS fixtures
Height (mm in)	300,0 11,8
With (mm in)	500,0 19,7
Wall Thickness (mm in)	5 0,2
Mass (Kg lb)	26,0 57,3
Product Life Expectancy	>20 years
Certifications I.A.L.A.	Surface colors compliant to I.A.L.A. E-108
Intellectual Property Trademarks	Water Guardian is a registered trademark of Composite Solutions Lda
Quality Assurance	ISO 9001:2008
Warranty	3 years
Standard Equipment	
	Data logger with Bluetooth connectivity with upgradability up to 32 sensors
	32Gb of data storage
	LCD display
	Adjustable measuring time intervals
Optional Equipment	
	Dissolved Oxygen Kit
	Electrical conductivity, temperature & depth sensor Kit
	GPS
	Temperature, humidity, wind & pressure Kit
	Surveillance camera/motion sensor Kit
	Solar Panels
	Upgraded battery capacity
	Status light
	Wi-Fi, VHF, Iridium, RF, GPRS, 3G & 4G

