

EARLY WARNING SYSTEM TSUNAMI BUOY



Mediterráneo Señales Marítimas, aware of the increasing concern on safety and security of human lives, has developed a complete Tsunami Early Detection and Warning System.

This system of advanced technology detects the event, processes and sends the information to a Control Centre with WEB platform.

A pressure sensor deployed in a water depth of up to 7,000 meters detects height variations of the water surface.

This buoy has been especially designed to be deployed in deep waters and hold the complex control and communication systems. The float is made from shock-resistant elastomer.

This buoy complies with all IALA Recommendations and safety Standards.

FEATURES

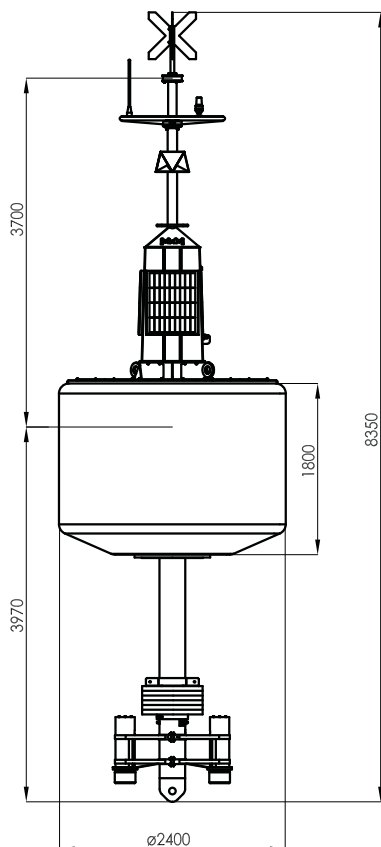
- ✓ Reaction time less than 1 minute (detection, processing and warning sending).
- ✓ Able to measure variations of the sea water column of 1 mm.
- ✓ Message structure compatible with the NOAA Tsunami Warning System.
- ✓ Redundant communications via satellite (permanently monitored from the control centre and the buoy CPU).
- ✓ Positioning by GPS.
- ✓ AIS AtoN transponder as an option.
- ✓ Float manufactured with closed-cell polyethylene foam sheet (no water absorption) projected with a layer of coloured polyurethane elastomer.
- ✓ Double solar power system.
- ✓ Marine LED lantern of high vertical divergence, with a luminous range of 5.5 nm.
- ✓ Radar reflector and top mark.
- ✓ Web-based Tsunami Warning Control Centre available.



EARLY WARNING SYSTEM TSUNAMI BUOY



Specifications subject to change without previous notice.



Superstructure	
Material:	Marine aluminium.
Coating:	Marine paint highly resistant to corrosion and UV radiation, according to chromatic IALA Recommendations.
Top mark:	According to IALA Recommendations.
Radar reflector:	10 m ² (X Band) to improve radar echo of the buoy.
Solar modules capacity:	Up to 4 nos. vertical solar modules + 4 nos. horizontal solar modules.
Batteries capacity:	Up to 400 Ah, CPU control unit and communication system, into a watertight cabinet with safety lock.
Accessories:	Security and protection ring for maintenance works.
Lifting eyes:	2 nos.
Hardware:	Stainless steel.

Float	
Diameter:	2.4 metres.
Material:	Closed-cell polyethylene solid foam sheet.
Coating:	UV protected self-coloured polyurethane elastomer, high elasticity against impacts.
Top surface:	Anti-sliding, to increase security during maintenance.

Tail	
Material:	Hot-dip galvanized steel.
Ballast weights:	Treated steel, detachable.
Mooring eye:	1 no.
Protection:	Sacrifice anodes, to increase service life.

Buoy alarms
Battery voltage alarm.
Excess of consumption alarm.
Satellite communication failure alarm.
Tamper alarm.
Positioning alarm.
Modem alarm.

Sensor signals
Sensor battery alarm.
Percentage of sensor used.
Sensor temperature.
Sensor communication alarm.
Sensor hibernation alarm.
Sensor inclination alarm.

MODEL	FLOAT DIAMETER (*)	FOCAL HEIGHT (*)	FLOAT VOLUME	TOTAL WEIGHT	MAXIMUM CHAIN
EBM 24-TS	2.4 m	4.0 m	7.3 m ³	1,400 kg	1,600 kg

*Other diameters and heights available under request.



MEDITERRÁNEO SEÑALES MARÍTIMAS, S.L.L.
mesemar@mesemar.com • www.mesemar.com

