

# BUOYTRACKER II



## GPS-GLOBALSTAR LOCATION SYSTEM

***Who's watching over your buoy tonight***

**BUOYTRACKER II** is a unique system for remotely checking and monitoring the precise location of your buoy or other valuable asset, large or small almost anywhere on the globe.

**BUOYTRACKER II** builds on the successful BUOYTRACKER GSM system and uses GPS satellite positioning system, together with the GLOBALSTAR low earth orbit satellite data service and allows users to check the position of their buoy from a web page anywhere in the world; no special software is required. For larger networks, a PC based autotracker program is available to automatically locate any number of buoys or assets with information presented on chart or map. In addition, **BUOYTRACKER II** will watch over your buoy and alert you by email should it wander by more than 750m. **BUOYTRACKER II** sends a heartbeat message at regular intervals confirming correct operation.

**BUOYTRACKER II** is totally self contained and can run for up to 3 years on its internal batteries.

**BUOYTRACKER II** is small and installation is quick and simple. The device can be included at build time to be completely covert if required. Both the GPS antenna and GLOBALSTAR antenna can be fitted inside plastic or GRP buoys. The enclosure is sealed to IP-68 making it suitable for use in the open on deck in breaking waves.

**BUOYTRACKER II** is typically supplied packaged with internal batteries but can be offered with external DC power

**BUOYTRACKER II** is available without watch circle mode, but with real-time tracking. In this mode, the device will wake up at regular intervals and simply report it's position; ideal for tracking lone ocean crossings, surface drifters, etc.



### FEATURES:

- Compact design
- Easy to install and hide
- Simple to operate
- Ultra low power
- GLOBALSTAR data module
- 12 Channel GPS
- Heartbeat message
- Tracking mode

### APPLICATIONS:

- Buoy position peace of mind monitoring
- Buoy network monitoring
- Covert monitoring
- Delivery monitoring
- Asset monitoring and tracking
- Vehicle/vessel tracking

## OPERATION:

In operation, a user simply switches on the device, whereupon it will make several measurements of its position to be used as the centre of the watch circle. Each hour the system wakes up from low power mode, checks its position against the reference and if the position differs by more than 750m, an alarm is sent via GLOBALSTAR communications satellite network. Alarms are sent as emails and also to a web portal where the position can be seen on google maps.

Once an alarm message has been sent, the current position is used as the centre for a new watch circle, and checked once again in one hour. If the beacon has moved again, a new alarm is sent, if not, the beacon returns to sleep mode.

The system can accommodate inputs from external sensors such as hatch sensors, impact sensors, tilt sensors etc, please ask for additional information.

A GLOBALSTAR Service contract is required. Globalstar coverage is almost world wide, please check current coverage via the globalstar web site in advance of order [www.globalstar.com](http://www.globalstar.com) Planet Ocean offer a fixed price annual contract covering one heartbeat message per day and 3 alarms a month.

## SPECIFICATIONS:

### ELECTRICAL

**Input Power Supply:** Alkaline battery 5.6v 54AH internal diode protection.

**Power (Typical):** Active: 70mA

**Quiescent Sleep:** 80µA

**Battery Life:** Typically three years from a fresh pack, one heart beat per day, one alarm message per month.

**Storage:** -40°C to +85°C

### MECHANICAL

**Length:** 398 mm

**Diameter:** Main body 90mm dia.  
Maximum 95mm dia

**Weight:** 3.0 kgs

**Sealing:** IP68. Immersion proof to 2m

### GLOBALSTAR MODULE

**Frequency Bands:** 1615MHz

**Transmit power:** 300mW

### GPS MODULE

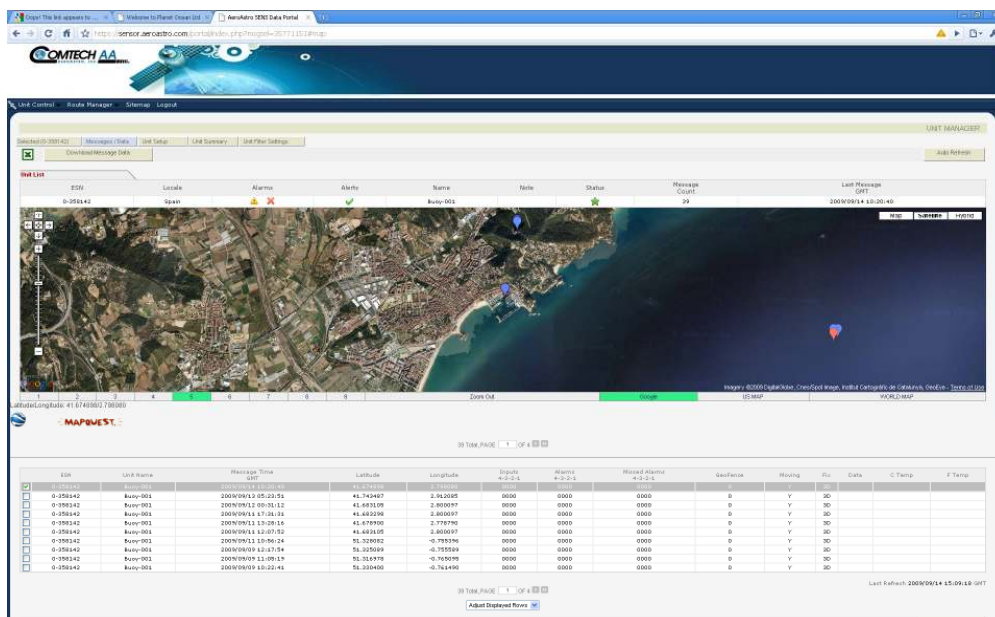
**Type:** 20 Parallel Channel

**Accuracy:** 10m (nominal)

**Update Rate:** 1 second

**Protocol:** NMEA-0183

**Sensitivity:** -159dBm



REF: BUOYTRACKER-II iss D Dec 2011