

## MGi GEOFENCE BUOY

### Description

This small buoy uses satellite transmission for locating and monitoring objects which should remain within an established security radius (Geofence).

MGi buoy is equipped with a double power supply system: rechargeable battery with solar panels and alkaline pack, which provide it with a **THEORETICALLY UNLIMITED BATTERY LIFE** in normal insolation conditions and with a complete reliability of operation.

It includes a satellite transceiver, GPS, a detachable body that can be adapted to different needs and magnetic (On/Off) switch.

### Operation

Once activated, MGi buoy transmits a message including GPS position and battery level. This first GPS position is set as the center of the Geofence security radius. This radius value is 0.125 miles by default. Both the radius and the reference position can be modified by telecommand from MSB Geofence software.

If the buoy is out of bounds, it will start transmitting every ten minutes, reducing message transmissions over time. The user receives a warning e-mail with a link to the position of the buoy in Google Maps.

Changes in the operation mode are made from MSB Geofence software in an easy and automatic way.

MSB Geofence receives messages by e-mail and it displays buoys in a vectorial C-MAP chart.

### Advantages

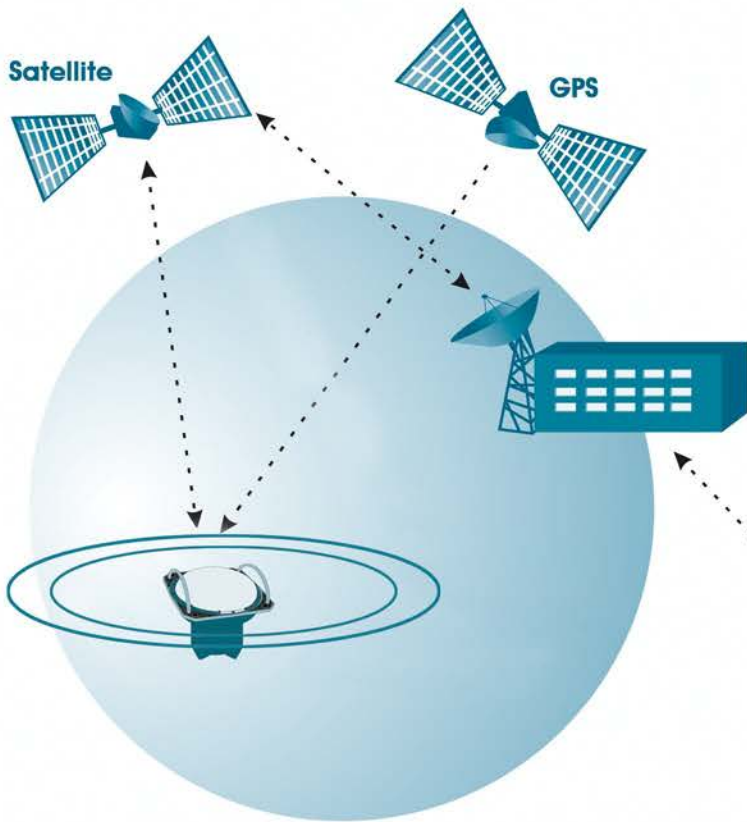
- **GLOBAL COVERAGE** through Iridium satellite network.
- Minimum communication cost. Possible monthly flat rate.
- The buoy can be designed according to different needs. MGi-B is self-floating (6 liters buoyancy) while MGi-P is mechanically fixed to an external support (navigation or signal buoys, shellfish rafts, anchored object, etc.).
- This buoy has no external antenna. Undetectable to both the naked eye and radar.
- **UNLIMITED BATTERY LIFE.** Solar panels which provide it with an adequate battery level in normal insolation conditions. Pack of alkaline batteries as a back up.

MGi-B



MGi-P

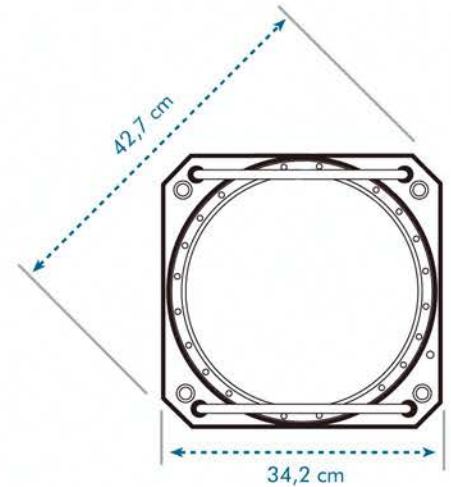
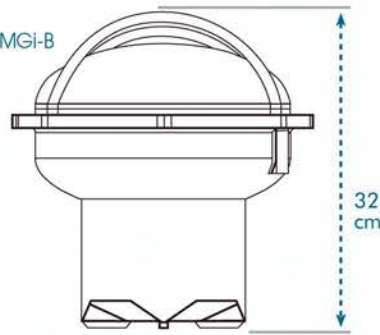




**Operating plan:**

Once activated, MGI buoy stores its first position using it as a reference (pre-established radius of 0.125 miles). The buoy transmits two positions per day. MSB Geofence software sends a daily security message to make sure that the buoys are within the established area. If one of them is out of bounds, the buoy will start a transmission of a message each 10 minutes. In this case, MSB Geofence software will send a warning e-mail to the user.

MGI-B



**Technical features:**

**Weight:** MGI-B 6.6 Kg and MGI-P 9.6 Kg (depending on the case)

**Battery:** 12 V

**Reserve of buoyancy (MGI-B):** 6 liters

**Operating temperature:** -5 °C to 40 °C

**Size:** According to drawing.

**Compatible software:** MSB Geofence 1.02

MGI-P

