



scientific and oceanographic

## SATELLITE BI-DIRECTIONAL RADIO BUOY

- DESIGNED TO SIGNAL OBJECTS OR SUBSTANCES DRIFTING IN THE SEA.
- TRANSMISSION OF POSITION, BATTERY CHARGE STATE, SEA SURFACE TEMPERATURE AND OTHER INFORMATION AT PROGRAMMABLE TIME INTERVALS.

- SATELLITE COMMUNICATION VIA IRIDIUM<sup>1</sup> SERVICE.
- CONTINUOUS OPERATION AT LEAST 30 DAYS.



W810 is a radio beacon working through Iridium1 satellite coverage to ensure signalling and remote localization of objects or substances abandoned in the sea.

By sending out a message at (programmable) time intervals, it is possible to determine, via an electronic messaging system, object location, time of detection, battery charge state and water surface temperature (providing the special option has been installed). Additionally, a flash light indicator (which can be activated continuously or via a message sent through Iridium<sup>1</sup>) enables drifting objects to be easily located also at night-time or under poor visibility conditions.

Information is transmitted in an encrypted format and can only be decrypted by the radio beacon owner or our own message management system.

## TECHNICAL SPECIFICATIONS

- Satellite uplink / downlink radio buoy.
- $\bullet$  Frequency : from 1616 MHz to 1626.5 MHz .
- RF power: 1 Watt typ.

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- Modulation: DE-QPSK.
- Multiplexing: TDMA/FDMA.
- Transmission rate: programmable, minimum every hour, maximum every 24 hours.
- Synchronization: via GPS timer.
- GNSS: low power GPS 66 channels.
- Information provided: time, position, battery status, surface. temperature (if installed), speed, estimated course.
- Working temperature: from -10°C to + 55°C (surface temperature, sea not frozen).
- Storage temperature: from  $-30^{\circ}$ C to  $+ 70^{\circ}$ C.
- Operating life with fully charged battery: 30 days, depending on the rate of transmission and the operating temperature.
- Battery: NiMh, rechargeable (battery charger W840).
- Dimensions: 360 x 270 mm.
- Weight: 5.8 Kg.
- CE (Directive RED), FCC and IC certified.
- Warranty: 2 years.

## (€ F© **IC**

<sup>1</sup>: Iridium and Iridium Everywhere are trademarks of Iridium Communications Inc. / Inmarsat is a registered trademark of Inmarsat plc.



The high-capacity battery pack and consumption optimisation efforts ensure a prolonged working time - with the W810 radio beacon able to operate for over 30 days.

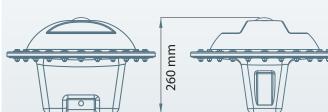
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Once it has been removed from its battery charger (model W840), the W810 radio beacon is activated by contact with water and will remain active until it is recovered.

A special through-hole provided in the bottom part of the beacon facilitates connection to the object to track.

Any information received from the W810 radio beacon is available through the Iridium 1 system or through our own messaging system which, upon the customer's request, can also forward the received information by email, SMS or Inmarsat<sup>1</sup>.

| Order Code | Description               | Packing Quantity |
|------------|---------------------------|------------------|
| P20022     | W810 Satellite radio buoy | 1                |







UNI EN ISO 9001:2008

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