

# Smartfind S10 AIS Beacon

The Smartfind S10 AIS Beacon is an innovative manually activated personal safety device which incorporates both AIS (Automatic Identification System) and GPS technology. It is designed to aid the speedy recovery of personnel/crew members who find themselves in difficulty at sea.



- Manually activated personal safety device to aid recovery of persons in difficulty
- Transmits GPS target tracking information over AIS
- Unique serialized ID
- Small and light for unobtrusive carriage
- Waterproof, buoyant and fully submersible to 60 meters
- Flashing LED light
- Minimum 24 hour continuous operation
- 5 year battery storage life

## SMARTFIND S10 AIS-BEACON SPECIFICATIONS

|                                      |  |
|--------------------------------------|--|
| <b>STANDARDS APPLIED</b>             | IEC 61097-14, 60945 (environmental/EMC), 61108 parts 1, ITU-R M.1371                                     |
| <b>ENVIRONMENTAL</b>                 | buoyant  |
| Exterior finish                      | Hi impact ABS/PC Translucent opal  |
| Sealing depth                        | Immersion to 60m (196 ft)  |
| Operating temperature                | -20°C to +55°C (-4°F to +131°F)  |
| Storage temperature                  | -30°C to +70°C (-22°F to +158°F)   |
| <b>BATTERY</b>                       |  |
| Type                                 | 6V Lithium Metal   |
| Replacement                          | By service centre  |
| Use                                  | Logged by microcontroller  |
| <b>OPERATION</b>                     |  |
| Activation                           | Manual two stage   |
| Self test (short)                    | Battery use indication   |
| GPS Self test (long)                 | TEST transmission with GPS position  |
| <b>TRANSPORTATION</b>                |  |
| Air cargo                            | IATA UN 3091, not restricted   |
| Classification                       | PI970 Section II   |
| <b>ELECTRICAL</b>                    |  |
| <b>AIS Transmitter</b>               |  |
| Frequency                            | AIS channel 1 - 161.975 MHz, AIS channel 2 - 162.025 MHz   |
| Power                                | 2W nominal   |
| Transmit antenna                     | Integrated PCB   |
| AIS messages transmitted             | Message 1 (ID, GPS position, SOG, COG, UTC)<br>Message 14 (MOB-ACTIVE or MOB TEST)<br>Factory programmed |
| ID number                            |  |
| <b>GPS receiver</b>                  |  |
| GPS type                             | 50 channel   |
| Antenna type                         | Ceramic patch  |
| GPS position update                  | Every minute   |
| <b>PHYSICAL</b>                      |  |
| Length                               | 199mm (7.8")   |
| Diameter at widest point             | 51mm (2.0")  |
| Weight                               | 186g (6.5oz)   |
| <b>Deployment</b>                    |  |
| Hands free                           | Belt or arm pouch with head band strap included  |
| Hand held                            | Wrist lanyard included   |
| Security                             | lanyard fixing point   |
| <b>FUNCTIONAL</b>                    |  |
| First transmission                   | After 15 seconds (no GPS)  |
| Range                                | 4 nautical miles (typical)   |
| Secondary location device            | Flashing white LED and status indicator  |
| <b>PART NUMBER</b>                   |  |
| Smartfind S10 AIS Beacon retail pack | 98-051-001A  |

Dealer:

Orolia Ltd, Silver Point, Airport Service Road, Portsmouth. PO3 5PB. United Kingdom  
Tel: +44 (0) 23 9262 3900 Fax: +44 (0) 23 9262 3998  
E-mail: sales.mcmurdo@orolia.com www.mcmurdomarine.com

Please note that all information given in this brochure is intended to be useful and informative and is correct to the best of our knowledge at time of print. No liability can be accepted for inaccuracies or omissions. The right is reserved to amend this information without prior notice.



Issue 4, April 2012

mcmurdo  
safety for professionals

# Smartfind S10 AIS Beacon



Lifesaving for anyone  
who works on or around water

## What is Smartfind S10 AIS Beacon?

The Smartfind S10 AIS Beacon is an innovative manually activated personal safety device which incorporates both AIS (Automatic Identification System) and GPS technology. It is designed to aid the speedy recovery of personnel/crew members who find themselves in difficulty at sea.

**WATERPROOF  
AND FULLY  
SUBMERSIBLE  
TO 60 METERS**



Smartfind S10 is waterproof, buoyant and compact, intended for carriage by divers, crew and anyone who works on or carries out activities on the water.

The Smartfind S10 transmits target survivor information, including structured alert messages, GPS position information and a serialised identity number. An inbuilt high precision GPS receiver provides accurate position information which is frequently updated to assist in quick recovery of persons in difficulty.

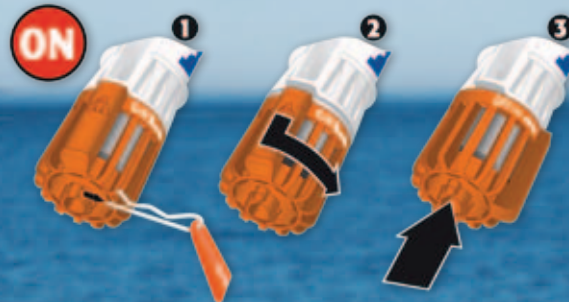
S10 AIS Beacon target information can be viewed using standard ships AIS equipment such as Class A and Class B transponders and a wide selection of receive only AIS units. AIS equipped vessels and land based VTS stations within the local vicinity will also have visibility of the AIS-beacon signal.

Whether displayed on the AIS itself or on a companion plotter or ECDIS screen, the unique alert message will clearly indicate the Smartfind S10's exact location, distance and bearing.

Smartfind S10 is buoyant, waterproof to 60 meters, will transmit continuously for a minimum of 24 hours and has a 5 year battery storage life. It also features a flashing indicator light, giving a localised visual fix and assisting in attracting attention after nightfall.

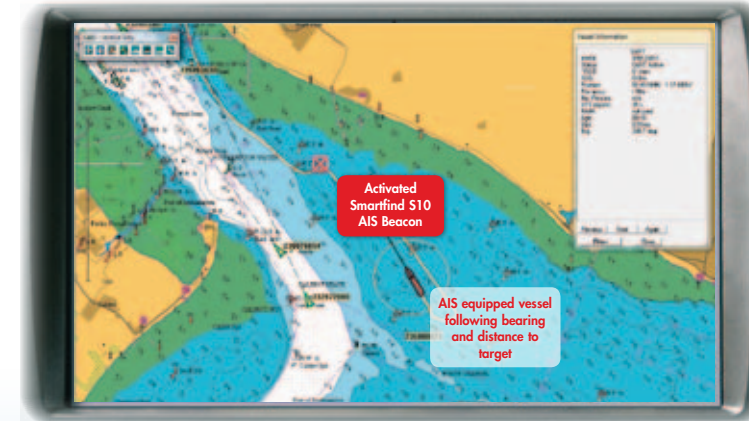
## Simple to activate

Smartfind S10 AIS Beacon is simple to operate, even in a gloved hand. When the person in trouble has been successfully retrieved from the water, the beacon can be switched off. A built in test facility indicates whether or not battery replacement is advised.




## How Smartfind S10 AIS Beacon works


- Smartfind S10 AIS Beacon is activated to attract attention.
- Alert is transmitted to all AIS enabled equipment within a 4 mile Radius (typical).
- AIS equipment\* displays the alert icon (pictured below).



\*Image shown is Euronav Software

- Precise target survivor information including GPS position becomes viewable when the chart plotter/ECDIS\* cursor is positioned over the alert icon.
- This information provides exact location, distance and bearing to person(s) in need of assistance.

As AIS SARTs are still very new, not all small-craft chart plotters with AIS show the correct SART icon  as recommended by the IMO. At the very least, they will show the same icon as used for other craft – normally an arrow. In addition, user settings generally allow you to configure the display to show the MMSI number, which in the S10 always begins with 972. This way you can differentiate the S10 from other vessels. If in doubt, check with your plotter manufacturer how they display SARTs on screen.

All new ECDIS plotters (on ships over 300 tonnes) will display the SART icon  correctly.

\*For use with AIS enabled chart plotters, contact your chart plotter manufacturer for further info.