

# **SMRT** ALERT

The sMRT ALERT is an innovative man overboard (MOB) device that utilises AIS and VHF DSC to enhance localised MOB recovery. By incorporating app-based status checks along with audible and visual acknowledgements, it instils user confidence, while also harnessing the water-activated alerting capabilities of DSC (Digital Selective Calling).

With two-way signalling, automatic alerting, and real-time accurate location tracking, the sMRT ALERT is the trusted MOB solution.



## **VHF DSC**

All nearby vessels are automatically alerted of the man overboard situation via DSC



## **AIS**

The live location of the man overboard is regularly updated and displayed via AIS



## **Dual GNSS**

Combines both GPS & Galileo GNSS receivers for accelerated detection



## **Class-M**

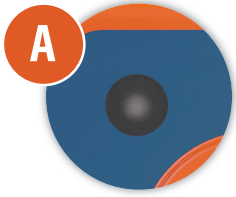
Compliant to European regulation ECC/DEC/(22)02 relevant to the usage of MOB devices



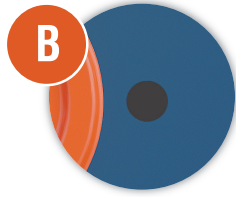
## **Mobile App**

Mobile phone compatibility via NFC (Near Field Communication) and sMRT App

## PRODUCT FEATURES



**A**  
**STROBE LIGHT**  
High powered strobe light to aid visual identification



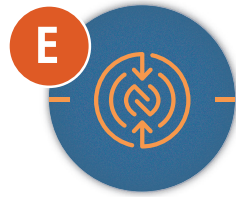
**B**  
**COLOURED LEDS**  
LEDs change colour dependent on status of beacon



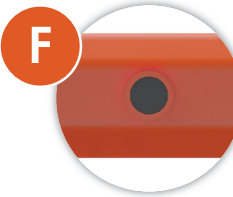
**C**  
**ARMING DOOR**  
Swing door to prevent false arming and activations



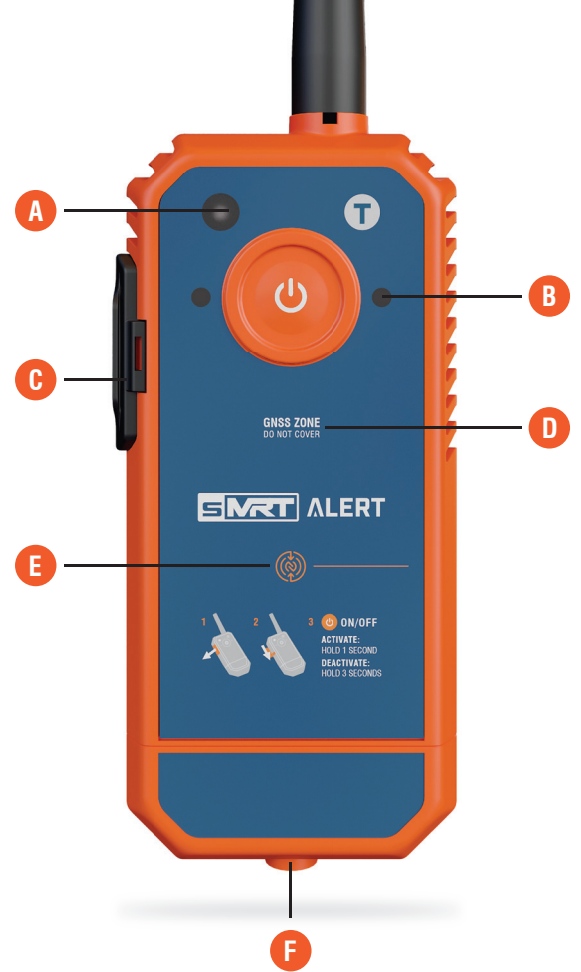
**D**  
**GNSS ZONE**  
Equipped with Dual GNSS for accurate location



**E**  
**NFC COMPATIBILITY**  
NFC area to connect device with the sMRT APP



**F**  
**WATER ACTIVATION**  
Device will activate when immersed in water for 2 seconds



**Audible Alarm**  
Highlight activation to both aid location and raise awareness of false activation



**Belt Pouch**  
A wearable neoprene belt pouch provides drop protection to protect the device



**5 Year Battery Life**  
Long term battery life with the confidence of UK manufacturer's warranty



**Test Functionality**  
Manual and app based testing provides a status check on power and functionality



**Dual Activation Methods**  
Device can be activated manually or after immersion in water meaning it will still work if user is incapacitated



**Environmentally Conscious**  
Packaged in 100% recyclable materials & batteries only changed by an approved service centre



**Clipping System**  
Multiple fixing systems allows easy attachment and integration with life jackets



**Dual GNSS Receivers**  
Integrated GPS and Galileo receivers for accelerated location detection



**Water Proof**  
The device is designed to withstand submersion up to 10 meters, ensuring its protection against water damage

## WHAT IS A Class-M MAN OVERBOARD DEVICE?

To protect AIS from overloads caused by irrelevant off-ship devices, a new regulation, ECC/DEC/(22)02, has been approved and is scheduled to be implemented from December 2024. Under this regulation, in countries that adopt the Class-M standard, AMRDs (autonomous maritime radio devices, such as AIS MOB), will no longer be permitted to use AIS channels 1 and 2. Instead, they will be required to switch to channel 2006, which is not designated as an emergency channel.

Where ECC/DEC/(22)02 is adopted, non-compliant MOB will be prohibited to use/license.



## GENERAL

BATTERY TYPE	9.0V 1650mAh Lithium Manganese Dioxide (LiMnO <sub>2</sub> )
MINIMUM ALERTING PERIOD	Minimum of 12 hours at -20°C.
BATTERY SHELF LIFE AT +20°C	5 years
OPERATING TEMPERATURE	-20° to +55°C (-4° to +131°F) as per IEC 60945
STORAGE TEMPERATURE	-30° to +70°C (-22° to +158°F) as per IEC 60945
DIMENSIONS	207mm (H) (including antenna) x 59mm (W) x 23mm (D)
WEIGHT	180g
ENVIRONMENTAL	IEC 60945
STROBE LIGHT	30 candela, 170 degree dispersion, flash rate 12 /minute
ENVIRONMENTAL RATING	IP68 to 10 metres depth
MOUNTING OPTIONS	Designed to integrate with a SOLAS approved life jacket
SELF ID	ITU-R M.585 Compliant factory programmed freeform Maritime Identity with 972 prefix
COMPASS SAFE DISTANCE	0.5m (1.5ft)
ALERTING RADIUS	Typically 5 NM

## AIS/VHF TRANSMITTER PACKAGES

ANTENNA TYPE	Vertically polarised
AIS Tx POWER OUTPUT	Nominal 1W EIRP
VHF TRANSMISSION FREQUENCIES	VHF DSC Channel 70: 156.525 MHz, AIS Channel 1: 161.975 MHz , AIS Channel 2: 162.025 MHz
VHF DSC Tx POWER OUTPUT	Nominal radiated power 500mW
SIGNALLING TYPE	AIS and VHF-DSC

## CONTROLS AND OPERATION

AUTOMATIC WATER ACTIVATION	After 2 seconds of water sensor immersion
MANUAL ACTIVATION	Once armed, press activate button

## GNSS RECEIVER

GNSS RECEIVER TYPE	GPS and Galileo
TTFF (TIME TO FIRST FIX)	15 seconds (typical) with nominal GPS signal levels -130dBm
GNSS UPDATE RATE	Every minute

## VHF DSC AND AIS ALERTS

AIS	Within 30 seconds of GNSS position acquisition
INITIAL OPEN LOOP DSC ALERT	Within 30 seconds after activation
SUBSEQUENT OPEN LOOP DSC ALERTS	Every 5 minutes for the first 30 minutes, every 10 minutes thereafter until VHF DSC acknowledgement or the battery expires.
FIRST DSC GPS DATA ALERT SENT	Immediately after GNSS position acquired

## APPROVALS

EUROPEAN APPROVALS	EN 303 132 V2.1.1*
US APPROVALS	RTCM 11901.1*

\* Approval is pending