

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

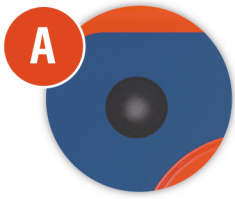
Compliant to European regulation ECC/DEC/(22)02 relevant to the usage of MOB devices



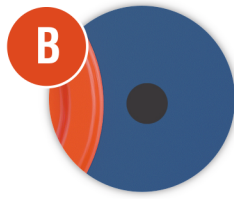
Mobile App

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



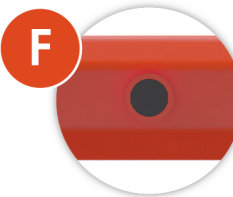
C
ARMING DOOR
Swing door to prevent false arming and activations



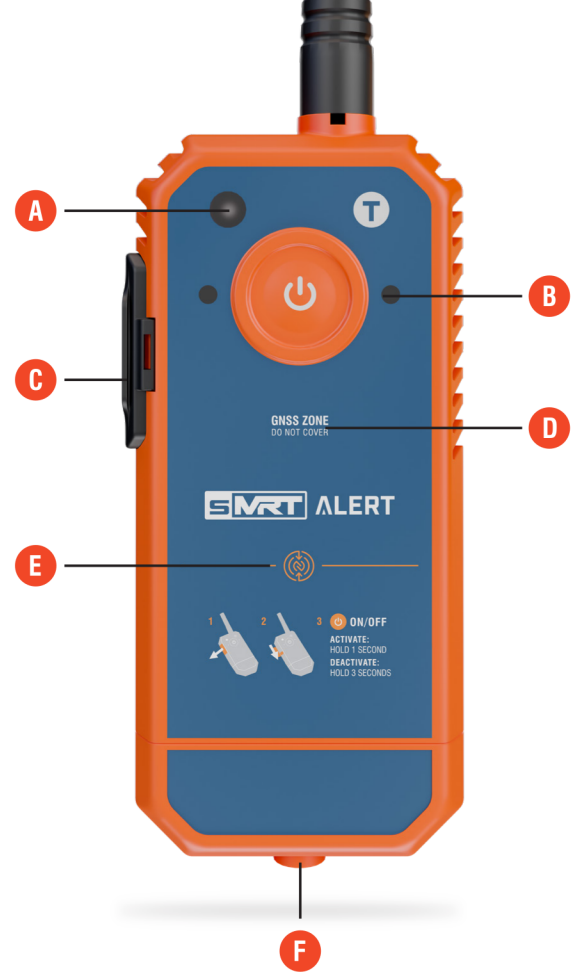
D
GNSS ZONE
Equipped with Dual GNSS for accurate location



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 ₂)
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*

* USA and Australia approvals are pending