WESCOM GROUP

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

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

AIS

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

DUAL GNSS

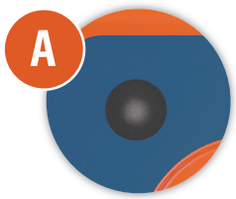
Dual GNSS
Combines both GPS & Galileo GNSS receivers for accelerated detection

Class-M

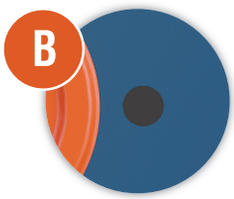
Class-M
Compliant to European regulation ECC/DEC/(22)02 relevant to the usage of MOB devices

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

PRODUCT FEATURES



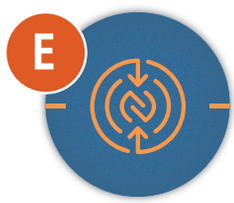
STROBE LIGHT
High powered strobe light to aid visual identification



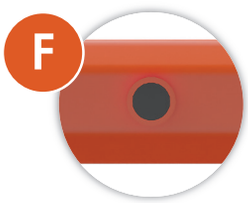
COLOURED LEDS
LEDs change colour dependent on status of beacon

ARMING DOOR
Swing door to prevent false arming and activations

GNSS ZONE
Equipped with Dual GNSS for accurate location



NFC COMPATIBILITY
NFC area to connect device with the sMRT APP



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
Neoprene belt pouch provides drop protection and flotation capability to help protect the device

5 Year Battery Life
Ample power for both frequencies with the confidence of UK manufacturer's warranty

Test Functionality
Manual and app based device safety, providing a health 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 must be changed at an approved service centre to insure recycling

Clipping System
Rugged clipping system allows easy attachment options for life jackets

Dual GNSS Receivers
Dual GPS and Galileo GNSS 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 MOBs), 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 MOBs will be prohibited to use/license.

GENERAL

BATTERY TYPE	9.0V 1500mAh Lithium Manganese Dioxide (LiMnO2)
BATTERY LIFE	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	137mm (H) x 62mm (W) x 26mm (D)
WEIGHT	212g
ENVIRONMENTAL	IEC 60945
STROBE LIGHT	30 candela, 170 degree dispersion, flash rate 12 /minute
ENVIRONMENTAL RESISTANCE	IP67
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	Up to 5NM (depending on height of antenna)*

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

GPS RECEIVER

GNSS RECEIVER TYPE	GPS plus 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**

*** Expected range derived from sea trials. Actual alerting range dependent on sea state, atmospheric conditions and height/altitude of receiving antenna.**

**** Approval is pending**

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