

# sMRT AU10-M

The sMRT AU10-M is a DSC Class M Maritime Survivor Locating Device (MSLD). Once armed, the device is designed to activate automatically in the event of a man overboard incident. Following activation, the sMRT AU10-M transmits a 121.5 MHz and VHF DSC distress alert whilst continuously updating location information, via AIS. Automatic activation will alert you of every MOB incident within 2 – 5 seconds.



**121.5**  
MHz

**121.5 MHz**  
A low power homing signal to assist local rescue efforts

**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

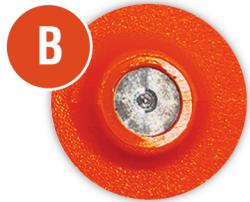
**M**  
Class-M

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

## PRODUCT FEATURES



**STROBE LIGHT**  
Antenna can be unscrewed and detached for easy storage



**WATER SENSOR**  
AU transmissions will automatically activate in water



**MANUAL ACTIVATION**  
Easy push button allows the PLB to be manually activated



**ARMING SWITCH**  
Arming switch, locks in and clearly displays if the PLB is ON or OFF



### Audible Alarm

Highlights activation to aid location and raise awareness of false activation



### Test Functionality

Manual 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



### Clipping System

Secure clipping system allows easy attachment options for life jackets



### Dual GNSS Receivers

GPS and Galileo GNSS receivers for accelerated location detection



### Water Proof

Designed to withstand submersion up to 10 meters, ensuring its protection against water damage

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

A Class-M MOB (Man Overboard) device is an AIS-enabled device designed to comply with ECC/DEC/(22)02 regulations. From December 31, 2024, only Class-M compliant MOBs and Mobile Aids to Navigation (AtoN) will be allowed to operate on AIS channels 1 and 2 in countries adopting the regulation, ensuring these channels are reserved for emergency use. Non-compliant devices will be restricted to channel 2006, which is not monitored for emergencies.



## GENERAL

BATTERY TYPE	6V Li-MnO2
BATTERY LIFE	Minimum of 12 hours at -20°C
BATTERY SHELF LIFE AT +20°C	>3 years
OPERATING TEMPERATURE	-20° to +55°C
STORAGE TEMPERATURE	-45° to +70°C
OPERATING HUMIDITY	To 95% non-condensing
SHOCK	20G min
VIBRATIONS	EuroCAE ED-14F
FLAMMABILITY RATING	ED 14F 26.3.3 Category C:
BUOYANCY	Buoyant (index=9%)
TRANSPORTATION	Air cargo UN 3091 not hazardous
DIMENSIONS (CASE)	80mm (H) x 95mm (W) x 35mm (D)
WEIGHT	250g
ENVIRONMENTAL	EN 303 132
STROBE LIGHT	15 Candela
ENVIRONMENTAL RESISTANCE	IP68:10
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	30cm (for <1° deflection)
ALERTING RADIUS	Up to 5NM (depending on height of antenna)*

## TRANSMITTER PACKAGES

AIR BAND FREQUENCIES	121.500 MHz
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 1W EIRP
SIGNALLING TYPE	AIS and VHF-DSC
DISTRESS MODULATION	AM compliant to ITU-R M.690-3
AIR BAND POWER	100mW PERP
MARINE-BAND POWER	Nominal 1W EIRP
VHF ANTENNA	Centre-fed dipole, comprising coaxial cable and lambda/8 coil whip

## GNSS RECEIVER

GNSS RECEIVER TYPE	GPS plus Galileo
TTFF (TIME TO FIRST FIX)	30 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

## CONTROLS AND OPERATION

AUTOMATIC WATER ACTIVATION	After 2 seconds of water sensor immersion
MANUAL ACTIVATION	Once armed, press Activation Button
OPERATING TIME	>12 hours continuous
STANDBY BATTERY LIFE	>3 years
PERMANENTLY ARMED	12 hours operation if armed for 12 months
GPS POSITION UPDATE	Minimum of 6 per minute
GPS TIME TO FIRST LOCK	Typically <1 minute under normal operating conditions
ALERT INDICATION	Audible and visible

## APPROVALS

EUROPEAN APPROVALS	EN 303 132 V2.1.1
EMC	EN 301 489-22 V1.3.1 EN 301 489-1 V1.8.1
SAFETY	EN 60950-1:2006
MARINE	IEC 60945:2002
RADIO (121.5 MHZ)	EN 300 152-2 V1.1.1 EN 302 961-2 V1.2.2
RADIO (AIS)	ETS 303 098-1 V1.2.1 RTCM 11901.1:2012

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



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