WESCOM GROUP

sMRT AU11

The sMRT AU11 is a dual operating AIS Personal Locator Beacon (PLB) alerting on the 121.5MHz international Search and Rescue (SAR) frequency, while simultaneously transmitting GPS coordinates on AIS.

Automatic activation will alert you of every MOB incident within 2 – 5 seconds. With GPS position updated every minute via AIS, yours and every nearby vessel becomes an instant SAR asset able to track multiple casualties up to 75 miles away.

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

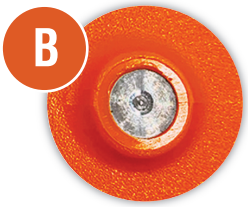
Dual GNSS
Combines both GPS & Galileo GNSS receivers for accelerated detection

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 301 489-3 EN 301 489-19
SAFETY	EN 63268-1: 2018 IEC 62368-1:2018 CSA/UL 62368-1:2019 AS/NZS 62368.1:2022
RADIO (121.5 MHZ)	EN 302 961 V1.2.1
RADIO (AIS)	EN 303 098 V1.2.1

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