SMART V300-X1

PRODUCT USER MANUAL

AIS

VHF DSC

121.5 MHz

CLASS-M

GNSS

TABLE OF CONTENTS

INTRODUCTION

Introduction	**3**
Glossary of terms & acronyms	**4**
Warnings & safety information	**5-6**

sMRT V300-X1 OVERVIEW

Introduction	**7**
What's in the box?	**8**
Features	**9**
Device label	**10**

HOW TO USE THE DEVICE

How to arm your device	**11**
How to activate your device	**12**
How to de-activate your device	**13**
Prevention of accidental activation	**14**
Testing	**15-18**
Additional Information	**19**
Mobile application	**20-21**

DOCUMENTATION

Warranty	**22-23**
Disclaimer	**23**
FCC compliance statement, trademark notice, terms and conditions of sale	**24**
ATEX Certification	**25**
Specification	**26-27**
Product attachments	**28**
Notes	**29**

INTRODUCTION

This user manual provides all the information required to operate and test the sMRT V300-X1. The following symbols and conventions are used to indicate important information. Always observe these instructions. Ensure you read the warnings & safety information section of this manual before first use of the device.

WARNINGS: Instructions that, if ignored, could result in death or serious personal injury caused by incorrect operation of the equipment. These must be observed for safe operation.

CAUTIONS: Instructions that, if ignored, could result in personal injury or material damage caused by incorrect operation of the equipment. These must be observed for safe operation.

IMPORTANT NOTES: Important instructions that should be adhered to during system operation.

TYPOGRAPHIC CONVENTIONS

1. sMRT V300-X1 hardware features are displayed in bold upper case letters e.g. **ARMING SWITCH.**

2. Operation status is displayed in bold upper case letters with square brackets, e.g. **[OFF]**.

USING YOUR sMRT V300-X1 FOR THE FIRST TIME

Prior to first use, please ensure that you have fully read and understand the user manual and that you perform a full system test, detailed on Page 18.

WARNING: sMRT V300-X1 record of ownership. As a responsible manufacturer of life saving man overboard devices, the manufacturer maintains an ownership registration database to provide contact details to Government Search and Rescue (SAR) authorities in the event of an emergency.

CAUTION: The sMRT V300-X1 should only be used in an emergency. **DELIBERATE MISUSE MAY INCUR A SEVERE PENALTY.**

GLOSSARY OF TERMS & ACRONYMS

1

121.5 MHz – Very high frequency (VHF) 121.5 for international air distress

Aa

Ack – Acknowledgement

AIS – Automatic Identification System

Cc

Class-M – MOB class for DSC marine radio communications

Dd

DSC – Digital Selective Calling

Ee

ECDIS – Electronic Chart Display and Information System

EPIRB – Emergency Position Indicating Radio Beacon

Ff

FCC – Federal Communications Commission

Gg

Galileo – European Union satellite system

GNSS – Global Navigation Satellite System

GPS – Global Positioning System

Ii

IS – Intrinsically Safe

Ll

LED – Light Emitting Diode

Mm

MAYDAY – Voice distress priority message

MF – Medium Frequency

MHz – Megahertz

MMSI – Maritime Mobile Service Identity

MRT – Marine Rescue Technologies

MSLD – Maritime Survivor Locating Device

mW – Milliwatt

Pp

PFD – Personal Flotation Device

Rr

RTCM – Radio Technical Commission for Maritime Services

Rx – Radio receiver

Ss

SAR – Search & Rescue

Serial Number – Manufacturer's identification number

SOLAS – Safety Of Life At Sea

Tt

Tx – Radio transmitter

Vv

VHF – Very High Frequency

Ww

W – Watt

WARNINGS & SAFETY INFORMATION

WARNINGS:

- The sMRT V300-X1 is a local area Maritime Survivor Locating Device (MSLD), that transmits emergency messages via VHF DSC, 121.5 MHz and the wearer's GNSS position via AIS.
- Before first use, perform a full system test to confirm that the device functions correctly.
- Once fitted into a PFD, a full system test of the sMRT V300-X1 should be performed every 3 months. Do not test the device more than once per month to avoid affecting battery performance in an emergency.
- The sMRT V300-X1 should only be used in marine environments and is **NOT** for use on land.
- The sMRT V300-X1 should **ONLY** be used in an emergency. **DELIBERATE MISUSE MAY INCUR A SEVERE PENALTY**.
- When used in a commercial environment annual inspection and recertification of the sMRT V300-X1 by an authorised service partner is recommended every 12 months.
- Do not dismantle the sMRT V300-X1 as it contains no user serviceable parts. Authorised service partners offer a full and comprehensive service and repair facility for recertification of units and battery replacement. Please see the full list of service partners on smrtsos.com.
- The high intensity strobe light on the unit may cause discomfort if it is viewed for long periods. Avoid staring directly at it when operational.
- The sMRT V300-X1 uses positional data derived from its internal GNSS antenna to define the location of a man overboard. A clear view of the sky is required to obtain a GNSS position.
- Please note that the device is only as accurate as the positional data it receives.
- The sMRT V300-X1 contains lithium batteries; do not puncture, deform, short circuit, recharge or incinerate the sMRT V300. Doing so will VOID the product warranty.
- Avoid handling the antenna unnecessarily when activated and do not attempt to remove the antenna.

- The sMRT V300-X1 must only be fitted to PFDs approved by the manufacturer. A full list of these can be found online.
- Only manufacturer approved and supplied attachment kits are to be used to fix the unit to the PFD.
- It is the user's responsibility to ensure that any ancillary equipment, such as survival suits/harnesses, PPE, belt pouch, clothing etc., do not interfere with the operation of the sMRT V300-X1.
- The sMRT V300-X1 will not float. Please attach a lanyard to a solid point in the lifejacket when near water to prevent loss.
- To avoid damaging or losing the device, please ensure that it is attached to a lanyard through the eye hole on the rear of the unit.
- When wearing a survival suit and unable to manually activate the sMRT V300-X1, ensure the whole beacon is immersed in water for a minimum of 2 seconds for water activation.
- Changes or modifications not expressly approved by manufacturer could void the user's authority to operate the equipment.

CAUTIONS:

- Do not paint the sMRT V300-X1 or clean it with aggressive detergents or solvents. Some cleaning materials may damage the seals and affect the integrity of the device. This will VOID the product warranty.
- To ensure the sMRT V300-X1 operates as intended in an emergency:
    - Avoid dropping the unit
    - Avoid leaving the unit in direct sunlight, or in an environment where it will be exposed to high temperatures in excess of 70 °C.
    - Inspect the device periodically for signs of wear and tear, visible cracks or other damage.

  If any damage is found, **DO NOT USE** and contact an authorised service partner.

INTRODUCTION

The sMRT V300-X1 is a multi-system MSLD designed to RTCM Standard 11901.2 and EU standard EN 303 132 V2.1.1 for use during a man overboard (MOB) emergency.

By integrating VHF DSC, AIS technologies, and 121.5 MHz, mariners in distress are equipped with life-saving tools that greatly enhance the likelihood of rapid location and recovery by vessels or Search and Rescue (SAR) authorities.

HOW THE sMRT V300-X1 WORKS

The sMRT V300-X1 uses the marine VHF radio band to transmit DSC distress alerts and updated GPS positions regularly from the casualty in the water to VHF DSC radios, as well as AIS equipped vessels within range. A short delay period prior to activation is designed to avoid the device being activated accidentally.

The sMRT V300-X1 transmits AIS and emergency VHF DSC transmissions during activation, as well as on 121.5 MHz. The sMRT V300 uses an internal GPS receiver to acquire a position within one minute of activation. The device then sends VHF DSC and AIS transmissions containing the device's current position.

Audible Indicator
The audible indicator notifies when the unit is alerting and raises awareness in case of false activation

MOB Location via AIS
The location of the MOB is regularly updated and displayed on an AIS enabled device.

121.5 MHz

121.5 MHz
Features a low power homing signal to assist local rescue efforts

Dual Activation Methods
The device can be activated manually or automatically upon immersion in water for more than 2 seconds

Visual DSC Acknowledgement
LEDs indicate that the DSC distress signal has been received and acknowledged by a third party

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

CLASS-M

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

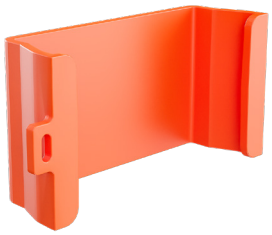
Alert Signal via VHF DSC
All nearby vessels are automatically alerted to the man overboard situation via VHF DSC

WHAT'S IN THE BOX?

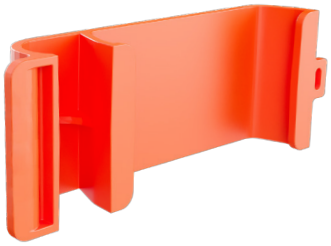
- **A** sMRT V300-X1
- **B** Life Jacket Bladder Attachment Clip
- **C** Oral Tube Mounting Clip
- **D** Tether Line (not pictured)

A

B



C

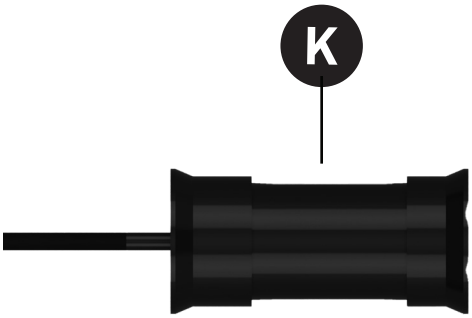


FEATURES

- **A** Antenna
- **B** Lanyard Attachment Point
- **C** Strobe Light
- **D** TEST Button
- **E** Arming Door
- **F** Left LED
- **G** Right LED
- **H** ON/OFF Button
- **I** GNSS Zone (inc GPS & Galileo)
- **J** NFC Zone
- **K** Water Sensor

LANYARD ATTACHMENT POINT

The lanyard attachment point on the rear of the device allows for the cord of the lanyard to be passed through and tied securely.



WATER SENSOR

The water sensor lead is attached to the bottom of the sMRT V300-X1. The sensor must be immersed in water for a minimum of 2 seconds to activate.

DEVICE LABEL

The rear of the unit features a label indicating all relevant device and safety information as well as compliances. Please make sure you are familiar with the information displayed.

AIS – The location of the MOB is regularly updated and displayed on an AIS enabled device.

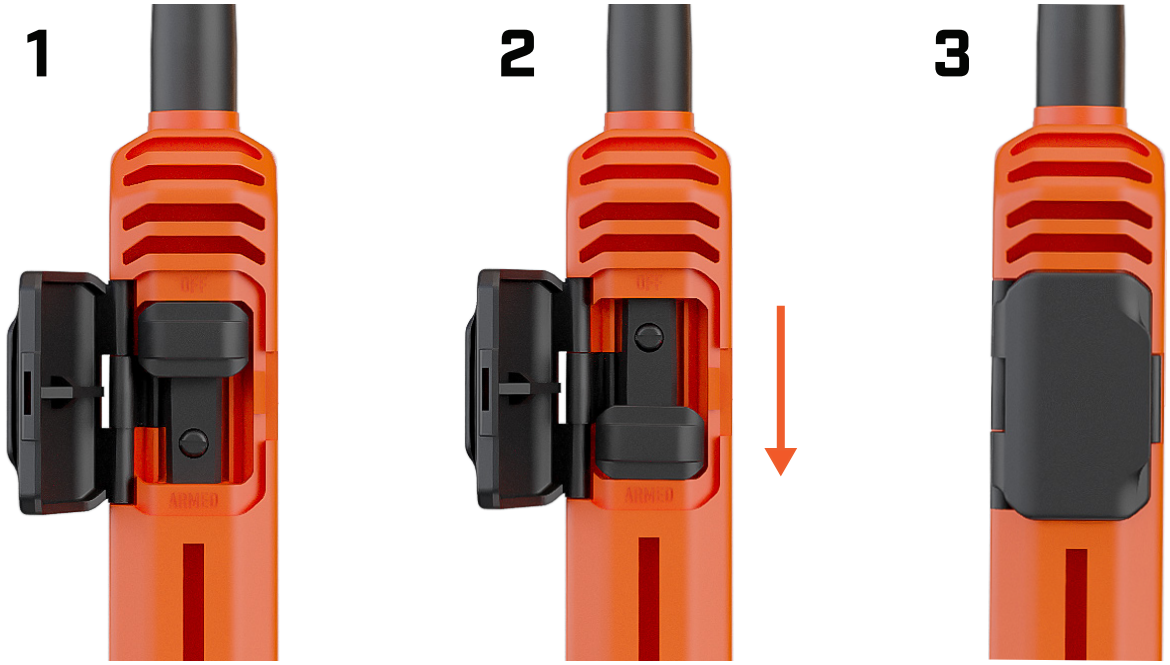
VHF DSC – All nearby vessels are automatically alerted of the man overboard situation via DSC

121.5 MHz – Features a low power homing signal to assist local rescue efforts

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

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

HOW TO ARM THE DEVICE



1. The beacon is shipped **[OFF] [UNARMED]**.
2. Begin by opening the **ARMING DOOR COVER,** which is located on the side of the beacon.
3. Then slide the **ARMING SWITCH** down to the **[ARMED]** position.
4. Finally, close the **ARMING DOOR COVER** to keep the switch securely in position.

We recommend that when not in use that the device is **[OFF].**

HOW TO ACTIVATE THE DEVICE

To activate the sMRT V300-X1 please follow the steps below.

1. Ensure the device is **[ARMED]**
2. Press the **ON BUTTON** for 5 seconds
3. -OR- Immerse in water for 2 seconds

IMPORTANT NOTE: For optimal performance of automatic water activation, it is necessary for the water sensor lead to be completely immersed in water for a minimum duration of 2 seconds.

HOW TO DE-ACTIVATE THE DEVICE

1. Press and hold the **ON BUTTON** down for 3 seconds. -OR-

2. Open the **ARMING DOOR** and slide the **ARMING SWITCH** from **[ARMED]** to the **[OFF]** position. This will stop all transmissions.

3. Class A DSC radios and shore stations may disable further DSC transmissions remotely as part of a SAR operation. This will acknowledge the emergency and the beacon will show a green indicator but will continue to broadcast its position on AIS until it is manually de-activated.

4. Contact the Coast Guard or Search and Rescue Coordination Centre serving your region at the earliest possible opportunity to advise them that you have cancelled the alert. We advise that this broadcast is made on Channel 16 for VHF or 2182 for MF.

IMPORTANT NOTE: If you do not have access to a VHF marine radio, contact your search and rescue authority by telephone and AIS transmissions containing the casualty's current position.

PREVENTION OF ACCIDENTAL ACTIVATION

The sMRT V300-X1 features an **ARMING DOOR** to prevent the device from being accidentally activated. In addition, manual activation is a two-stage process, requiring the user to open the **ARMING DOOR** and slide the **ARMING SWITCH** to the **[ARMED]** position to arm the device. The user must then press and hold the **ON BUTTON** to activate the device.

If the device is accidentally activated, the user can slide the **ARMING SWITCH** to **[OFF]** within 10 seconds to prevent the transmission of any distress signals.

HOW TO HELP PREVENT FALSE ALARMS

- Keep the device away from young children and educate all users in device operation and the ramifications of false alarms.
- Ensure that the device is stored in a dry and cool environment.

sMRT V300-X1 LED INDICATIONS

During operation, the **LEFT LED** indicates device status and the **RIGHT LED** indicates GPS status. The **LEDs** may display the following indications:

STATE	LEFT LED	RIGHT LED
Arming (good battery)	Green 3 flashes	Green 3 flashes
Arming (bad battery)	Red 3 flashes	Red 3 flashes
Return to idle	Red 1 flash	Red 1 flash
Alerting (no GNSS)	Purple slow flash	Off
Alerting (GNSS lock)	White slow flash	Off
Remote acknowledgement (DSC ack rx'd)	Green slow flash	Green solid
Alert cancelling	Red 1 flash	Red 1 flash

STATE	LEFT LED	RIGHT LED
Fault - critical battery	Red fast flash	Off
Fault - service interval	Red fast flash	White slow flash
Fault - enclosure tamper	Red fast flash	Purple slow flash

IMPORTANT NOTE: If you receive a fault during the test procedure. DO NOT USE and contact an authorised service partner

TESTING

A full system test is performed on the sMRT V300-X1, at the point of manufacture. Before first use, we recommend carrying out a periodic full self-test on the product.

After deployment into active service, it is recommended that a full system test of the sMRT V300-X1 should be performed every 3 months. DO NOT test the device more than once per month as this could affect battery performance in an emergency.

For optimum performance, it is recommended that the device be returned to an authorised service agent for annual service and recertification.

⚠ **WARNINGS**:

1. The self-test should be performed only within the first 5 minutes of any hour.
2. Ensure the device has a clear view of the sky during testing to receive a GNSS signal.
3. If the sMRT V300-X1 fails any element of a self-test or any full system test, take it out of service immediately and contact a service station.

SYSTEM TEST

To perform a test of the sMRT V300-X1 ensure the **ARMING SWITCH** is **[OFF]** and the hold the **[TEST]** button for more than 3 seconds.

Self-test **LED** indications are displayed for several seconds at this point and may display as follows: Short beeps (approx every 15-20 seconds).

The **LEFT LED** indicates device test status and the **RIGHT LED** indicates GPS test status.

STATE	LEFT LED	RIGHT LED
Test start (good battery)	Green solid	Green solid
Test start (bad battery)	Red solid	Red solid
Test start/waiting for GNSS lock (good battery)	Green slow flash alt	Green slow flash alt
Test start/waiting for GNSS lock (bad battery)	Red slow flash alt	Red slow flash alt
Test txing (AIS burst)	Purple fast flash alt	Purple fast flash alt
Test txing (DSC)	Purple fast flash alt	Purple fast flash alt

IMPORTANT NOTE: If you cannot acknowledge the DSC the test procedure is now complete. The test will automatically time out after 5 minutes or hold the T button to end.

Test (waiting for DSC ack)	White slow flash	Off
Test time out	Red 5 flashes	Red solid

Ack = acknowledgement **Alt** = alternating **Rx'd** = received **Txing** = transmitting

FULL SYSTEM TEST

1. The **LED** indicators shows battery condition **[GREEN]** is good, **[RED]** means replace the battery. During stage 1 the GNSS is activated to look for satellites.
2. The AIS test burst is transmitted — **LED** indicator is purple.
3. The DSC test message is transmitted — **LED** indicator changes to white.
4. The beacon waits for a DSC acknowledgement for up to 2 minutes — **LED** indicator is white
5. When a DSC acknowledgement is received the **LED** turns off.

IMPORTANT NOTE: During any test, if a fault is encountered, please try again. If the issue persists, remove the unit from service and return it to your nearest service center. If the **LEDs** do not show **[RED]**, the unit has passed the VHF DSC & AIS test and is fit for purpose.

During the test procedure a single burst AIS and VHF DSC message is transmitted in accordance with the international standards. Depending on conditions during testing, it is possible that an AIS and/or VHF DSC transmission may not be picked up by the receiving equipment.

If an AIS message and/or VHF DSC transmission is not displayed on the receiver this does not indicate that the device is faulty. Only when and if a fault is encountered, should the device be removed from service and returned to the manufacturer or an authorised service agent.

CANCEL A FULL SYSTEM TEST

Press and hold the **TEST BUTTON** again. OR slide the slide switch to the armed position and then back to the disarmed position.

ADDITIONAL INFORMATION

OPERATIONAL LIFE

The sMRT V300-X1 has an operational battery life of 5 years from the first use. When not in use, the product should be disarmed.

END OF LIFE STATEMENT

The manufacturer hereby declares that all materials, components and products supplied are in full compliance with RoHS & WEEE directives. At the end of the products operational life it must be returned to the manufacturer for safe disposal. If you are unable to return the unit then it must be disposed of according to local laws and regulations.

CHANGING CONTACT DETAILS OR OWNERSHIP

Factory assigned device MMSI numbers are allocated to sMRT V300-X1 units prior to shipping. It is the owner's responsibility to advise the manufacturer of any change of contact details or ownership of a sMRT V300-X1.

If ownership is transferred, you should contact the manufacturer or an authorised service partner to register the device in your name.

sMRT MOBILE APP

Download on the App Store | GET IT ON Google Play

The 'sMRT Beacon Management' app can assist you in managing your sMRT device. Please refer below for instructions on some of the key features.

CHECK BEACON STATUS

Quickly check the arming status of your device.

1. Press the **BEACON STATUS BUTTON** on the app home screen.
2. Press the **SCAN DEVICE BUTTON** on the NFC screen. When prompted, hold your phone up to the device and wait for the scan to complete.
3. Once complete, you will be shown a screen that will display the status of your beacon, which will either say **[ARMED]** or **[OFF]**.

This feature only applies to the sMRT ALERT and may not work with other devices.

SELF-TEST DEVICE

Perform a test and view the historical results of your device. Please note that whilst the test is ongoing you can not use the NFC scanning function. This will take approximately 5 minutes and will then be ready to use.

1. Inside the product screen, press the **TEST STATUS BUTTON**.
2. Press the **SCAN DEVICE BUTTON** on the NFC screen. When prompted, hold your phone up to the device and wait for the scan to complete.
3. You will be prompted to complete the NFC process again; please repeat step 2.
4. Once completed, your most recent test will appear at the top of the list, with all your previous results below. It will display a colour-coded summary, with red indicating **[FAILURE]** and green indicating a **[PASS]**.
5. You can inspect each test individually by pressing the arrow on the right of the tabs. This will provide you with a more detailed report of your test.

CHECK BATTERY LEVEL

View and understand your device's current battery levels.

1. Inside the product screen, press the **BATTERY STATUS BUTTON**.

2. Press the **SCAN DEVICE BUTTON** on the NFC screen. When prompted, hold your phone up to the device and wait for the scan to complete.

3. You will be prompted to complete the NFC process again; please repeat step 2.

4. You will then be shown a screen, which will display the battery level of your device. The status shown will either say **[GOOD]** or **[SERVICE REQUIRED]**, at which point you should **NOT** use the device.

If the battery test indicates less than 12 hours of battery life remaining, return the device to the manufacturer or an authorised service agent for battery replacement.

DO NOT ignore a low battery warning as the device may not operate to full capacity in a man overboard emergency.

DESTINATION MMSI TEST

Enter a destination MMSI to complete a closed loop test of your device. Please note this only available for testing purposes.

1. Click inside the product you'd like to use to perform the test, here you can enter the destination MMSI number.

2. After clicking, press the **SCAN DEVICE BUTTON** on the NFC screen. When prompted, hold your phone up to the device and wait for the scan to complete.

3. Once completed, you will be directed to the Add Destination MMSI screen. On first use, you will be prompted to type in your MMSI number and press the **ADD BUTTON** to pair your MMSI number.

4. The NFC screen will re-open and you will need to repeat step 2 twice. Once completed, your new MMSI number will show on screen and say **[PAIRED]**.

5. If you wish to remove a paired number, simply press the **BIN ICON** and repeat step 2 twice. Please note you can only add 1 MMSI number to your device.

WARRANTY

Your sMRT V300-X1 is covered by a warranty against manufacturing defects in materials and workmanship for a period of 1 year from the date of purchase, in accordance with the following conditions:

- Marine Rescue Technologies Ltd reserves the right to repair or replace a faulty product at its discretion, free of charge, excluding shipping costs.
- A valid proof of purchase from the original buyer is required for warranty claims.
- Claims must be submitted in writing to Wescom Group or an approved service partner. A list of servicing partners can be found at smrtsos.com.

Marine Rescue Technologies Ltd is not liable under the warranty for:

- Repairs or modifications performed on the MSLD using non-approved parts, including batteries, or by entities other than Marine Rescue Technologies Ltd or approved service dealers, a full list of approved dealers can be found on the sMRT website, smrtsos.com.
- Parts, materials, or accessories not manufactured by Marine Rescue Technologies Ltd; in such cases, the consumer will be covered by the guarantee/warranty offered to Marine Rescue Technologies Ltd by the manufacturer or supplier.
- Unpaid products or those under alternative warranty agreements

The battery is warranted until the expiry date, provided the unit is tested according to the information in the user manual

EXCLUDED ITEMS

The following item is excluded from the warranty;

- Extended water sensor lead

This warranty does not impact your statutory rights. The interpretation of this warranty is under English law. Please ensure you have fully read and understand the User Manual.

For further assistance, please reach out to our service department.
Email: smrt@wescom-group.com

DISCLAIMER

The sMRT V300-X1 is an MSLD that should only be activated as a last resort. Misuse or false activation is unlawful and irresponsible, and could result in prosecution or penalty.

The sMRT V300-X1 should not be relied on as the only source of man overboard notification and the vessel owner, operator or master must exercise common prudence and good seamanship at all times. Use of the sMRT V300-X1 in no way reduces liability of the vessel's master and crew who have the primary responsibility for safety on board. No device is 100% fail safe, nor can it guarantee safe rescue in an emergency. When activated, the sMRT V300-X1 is designed to transmit distress alerts to VHF DSC, AIS and 121.5 MHz equipped vessels or stations within range, but requires subsequent human interaction to acknowledge and respond to the distress alert.

Satellite GNSS lock and in-water tracking is dependent on the extent of satellite system coverage and reception at the time and location of the emergency. The actual time and success of rescue is therefore dependent on all these contributing factors and as such, is outside the control of the manufacturer.

This user manual contains important information that must be adhered to for reliable use and operation of the product. It is the owner's sole responsibility to make the effort to read this manual and to ensure that the equipment's operation and limitations are understood. Visit the manufacturer's website www.smrtsos.com to download the latest user manuals for all products. The manufacturer reserves the right to change specifications, equipment, installation and maintenance instructions without notice as part of the company's policy of continuous product development and improvement.

FCC COMPLIANCE STATEMENT

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

TRADEMARK NOTICE

Marine Rescue Technologies Limited, is the 100% owner of Marine Rescue Technologies Limited in the United Kingdom.

The absence of a product or service name or logo from those listed does not constitute a waiver of Marine Rescue Technologies Limited's trademark or other intellectual property rights concerning that name or logo.

Other product names mentioned within this document may be trademarks or registered trademarks, or a trade name of their respective owner. Contact Marine Rescue Technologies at mrtcustomerservice@wescom-group.com for a copy of our trademark policy before referencing or using any trademark or product name.

© Marine Rescue Technologies Limited 2024. All rights reserved. No part of this publication may be transmitted or copied in any form whatsoever, without the express written permission of Marine Rescue Technologies Limited.

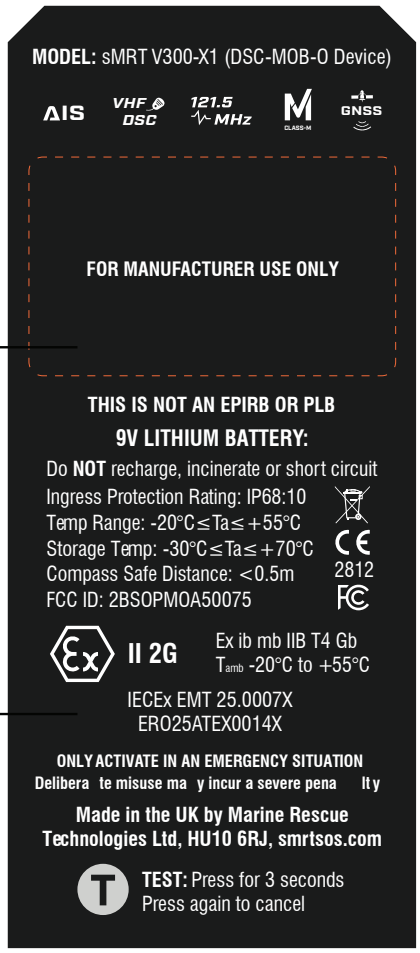
TERMS & CONDITIONS

Please visit www.smrtsos.com/terms-conditions to view our terms & conditions.

ATEX CERTIFICATION

Verison 1.1 - January 2026

The product serial number and year of manufacturer are marked on the equipment label.



Certificate Numbers

⚠ WARNINGS:

1. The sMRT V300-X1 must be kept in the pouch to protect against impact and potential damage, which is a **specific condition of use**.
2. There are no serviceable parts and repair is not permitted by the end user.

IMPORTANT NOTE: The end user must take suitable precautions to prevent exposure to harsh chemicals, such as strong acids or alkalines, which may damage the materials used in the construction of this component.

The label material needs to remain consistent for electrostatic charging reasons. The rear labels are printed on F150 polyester with 3M8132 (9471E) adhesive and laminating, ZND cut finishing. The labels are then applied by sticking onto the recess area on the rear of the device.

SPECIFICATION

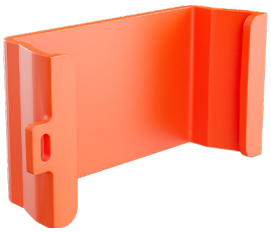
GENERAL	
BATTERY TYPE	9V Lithium battery
MINIMUM ALERTING PERIOD	Minimum of 12 hours at -20°C
BATTERY SHELF LIFE AT +20°C	5 years
OPERATING TEMPERATURE	-20° to +55°C (-4° to +131°F) as per IEC 60945:2002
STORAGE TEMPERATURE	-30° to +70°C (-22° to +158°F) as per IEC 60945:2002
DIMENSIONS	207mm (H) (including antenna) x 59mm (W) x 23mm (D)
WEIGHT	275g
ENVIRONMENTAL	EN 303 132 V2.1.1 IEC 60945:2002
STROBE LIGHT	30 candela, 170 degree dispersion, flash rate 12 /minute
ENVIRONMENTAL RATING	IP68 up to 10 metres depth
MOUNTING OPTIONS	Designed to integrate with a SOLAS approved life jacket
SELF ID	ITU-R M.585-9 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	
AIR BAND FREQUENCIES	121.500 MHz
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 1W EIRP
SIGNALLING TYPE	AIS and VHF-DSC
CONTROLS AND OPERATION	
AUTOMATIC WATER ACTIVATION	After 2 seconds of water sensor immersion
MANUAL ACTIVATION	Once armed, press and hold the activate button
GPS RECEIVER	
GNSS RECEIVER TYPE	GPS and Galileo
TTFF (TIME TO FIRST FIX)	25 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 received or the battery expires
FIRST DSC GPS DATA ALERT SENT	Immediately after GNSS position acquired
APPROVALS	
RED ARTICLE 3.1 (A)	IEC 62368-1:2018 EN IEC 62368-1:2020+ A11:2020 CSA/UL 62368-1:2019 AS/NZS 62368-1:2022
RED ARTICLE 3.1 (B)	EN 301 843-8 V1.1.1 EN 301 843-1 V2.3.1 EN 60945:2022
RED ARTICLE 3.2	EN 303 132 V2.1.1 IEC 63269:2022 IEC 61108-3:2003 EN 302 152-1 V1.1.1 EN 303 098 V2.2.1
RED ARTICLE 3.3 (G)	RTCM 11901.2:2022
ATEX	IECEx: IEC 60079-0:2017; IEC 60079-11:2023; IEC 60079-18:2014+AMD1:2017 ATEX: EN IEC 60079-0:2018; EN IEC 60079-11:2024; EN 60079-18:2015+A1:2017

PRODUCT ATTACHMENTS

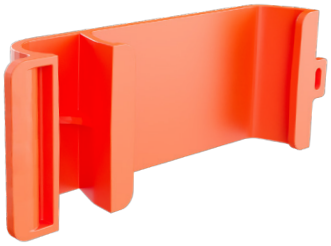
sMRT V300-X1

P/N: MOA-40076



Life Jacket Bladder Attachment Clip

P/N: 713020300



Oral Tube Mounting Clip

P/N: 713020301

Tether

P/N: 713000134

NOTES

WESCOM GROUP, UNIT J1, ANLABY TRADE PARK, SPRINGFIELD WAY, ANLABY, HULL, HU10 6RJ

TEL: +44 (0)1482 679 300 | SMRT@WESCOM-GROUP.COM | WWW.SMRTSOS.COM